

EXHIBIT 1

29 January 2018



25th Anniversary Edition

Recent Trends in Securities Class Action Litigation: 2017 Full-Year Review

Record Pace of Filings Led by a Continued Surge in Merger Objections

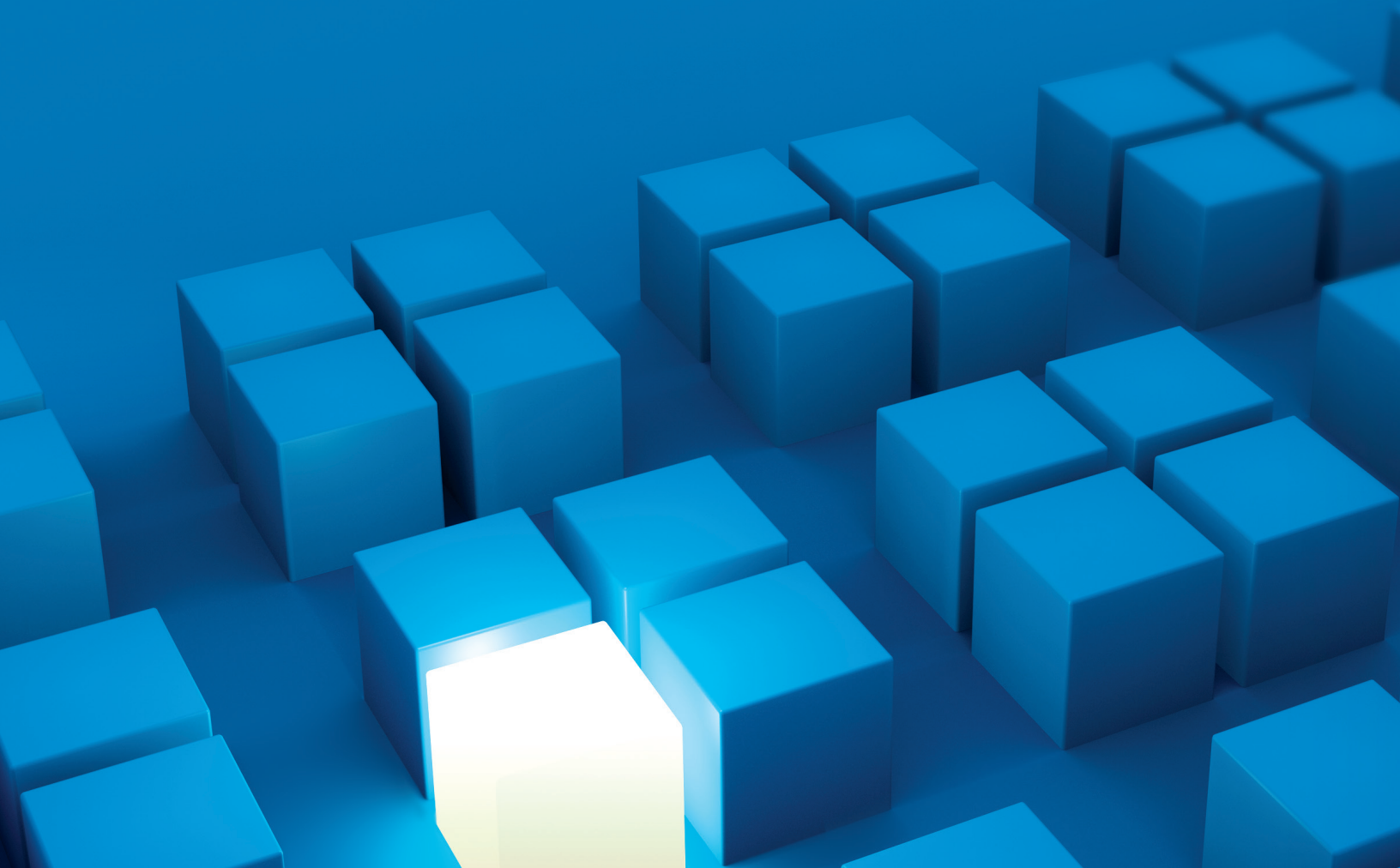
Highest Number of Dismissals and Lowest Settlement Values Since the Early 2000s

By Stefan Boettrich and Svetlana Starykh

Foreword

I am excited to share our 25th anniversary edition of NERA's *Recent Trends in Securities Class Action Litigation* with you. This marks the 25th year of work by members of NERA's Securities and Finance Practice. In this edition, we document an increase in filings, which we also noted last year, again led by a doubling of merger-objection filings. While this may be the most prominent result, this report contains discussions about other developments in filings, settlements, and case sizes as measured by NERA-defined Investor Losses. Although space limitations prevent us from sharing all of the analyses the authors have undertaken to create this latest edition of our series, we hope you will contact us if you want to learn more, to discuss our data and analyses, or to share your thoughts on securities class actions. On behalf of NERA's Securities and Finance Practice, I thank you for taking the time to review our work and hope that you will find it informative and interesting.

Dr. David Tabak
Managing Director



Recent Trends in Securities Class Action Litigation: 2017 Full-Year Review

Record Pace of Filings Led by a Continued Surge in Merger Objections

Highest Number of Dismissals and Lowest Settlement Values Since the Early 2000s

By Stefan Boetttrich and Svetlana Starykh¹

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Introduction and Summary²

In 2017, an explosion in securities class action filings reflected growth not seen in almost two decades, and drove the average filing rate to more than one per day. For a second year in a row, growth was dominated by a record number of federal merger-objection filings, continuing a trend sparked by various state court decisions that restricted “disclosure-only” settlements. In the first quarter, more cases alleging violations of SEC Rule 10b-5 under the Securities and Exchange Act of 1934 were filed than in any quarter since the aftermath of the dotcom boom. Over the entire year, filings alleging violations of Rule 10b-5, or Section 11 or Section 12 of the Securities Act of 1933, grew for a record fifth straight year.

The total size of filed securities cases, as measured by NERA-defined Investor Losses, was \$334 billion and well above average for a second year, mostly due to numerous large cases alleging various regulatory violations. Allegations related to regulatory violations and misleading performance projections by management seem to be slowly supplanting claims related to accounting issues and missed earnings guidance.

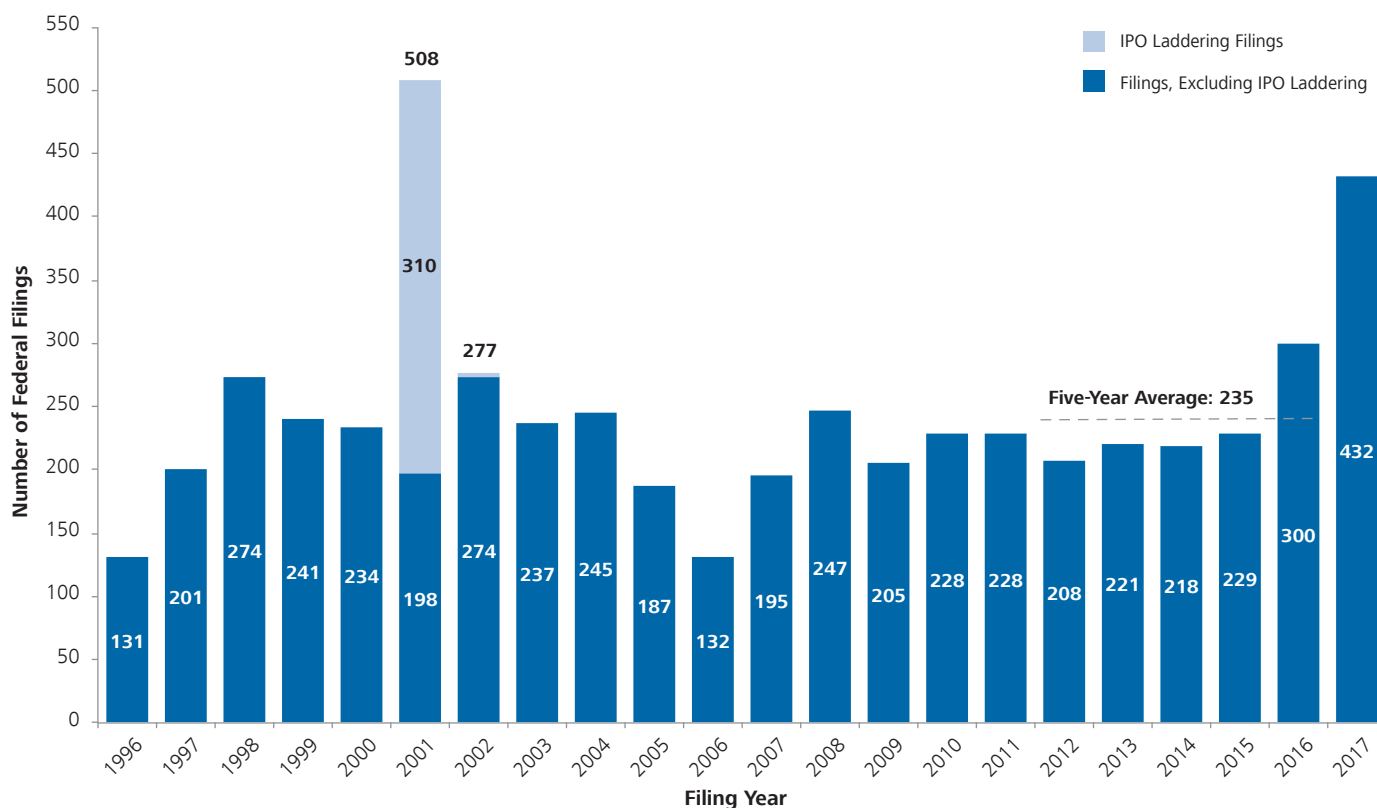
A record rate of case resolution was motivated by a more than 40% spike in dismissals and a 30% increase in settlements. Despite this, the value of settlements plunged to lows not seen since the early 2000s, stemming from a dearth of large or even moderate settlements. Due to an unprecedented rate of voluntary dismissals, nearly 16% of cases filed in 2017 alleging violations of Rule 10b-5, Section 11, or Section 12 were resolved by the end of the year.

Trends in Filings

Number of Cases Filed

There were 432 federal securities class actions filed in 2017, the third straight year of growth (see Figure 1). For the second year in a row, the filing rate was the highest seen since passage of the Private Securities Litigation Reform Act (PSLRA), with the exception of 2001 when an unusually high number of IPO laddering cases were filed. The number of filings was 44% higher in 2017 than 2016, marking the fastest rate of growth since 2007. The number of filings grew 89% over the past two years, a rate not seen since 1998. The level of 2017 filings was also well above the post-PSLRA average of approximately 244 cases per year, and 84% higher than the five-year average rate, continuing a departure from the generally stable filing rate since the aftermath of the 2008 financial crisis.

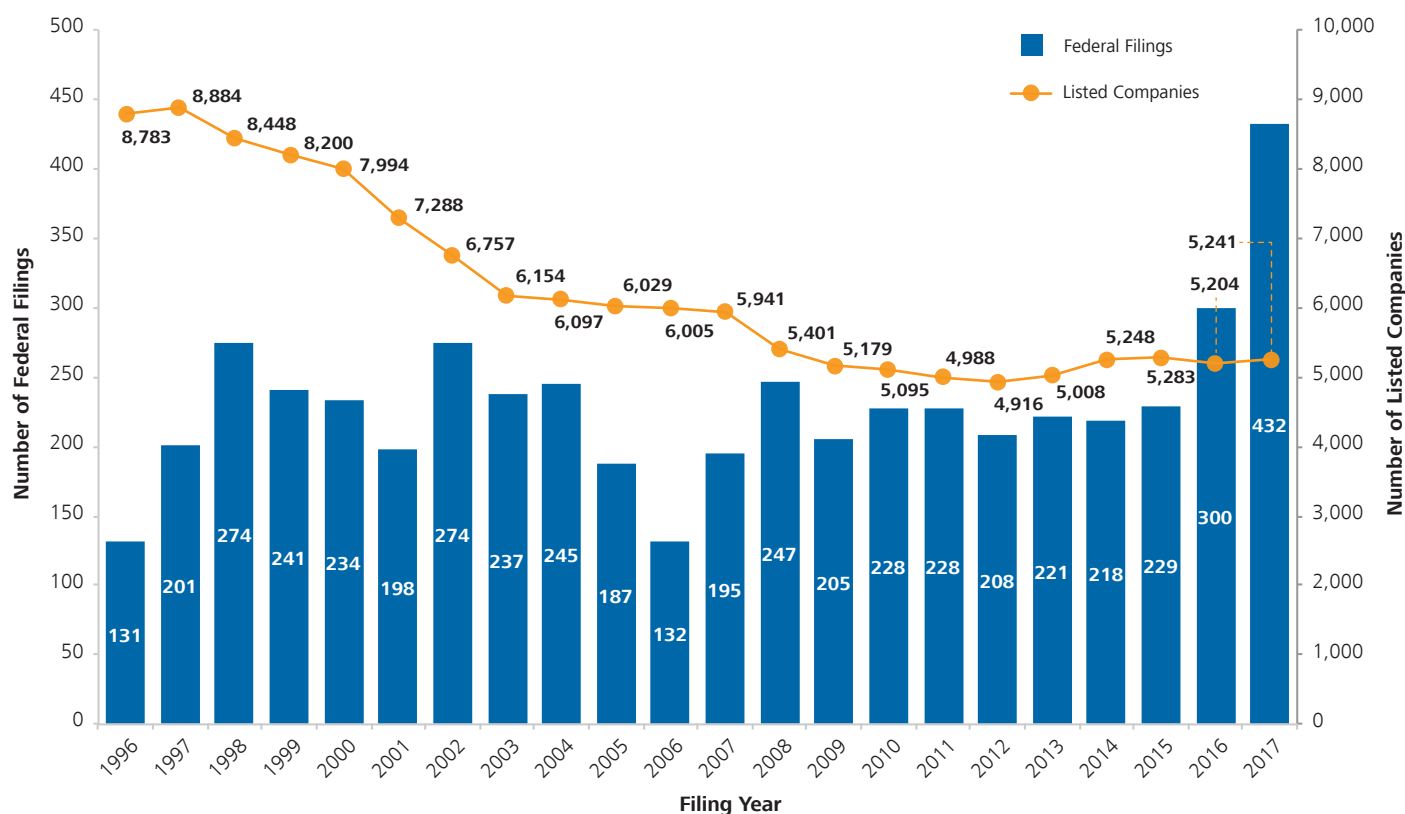
Figure 1. **Federal Securities Class Action Filings**
January 1996–December 2017



As of November 2017, there were 5,241 companies listed on the major US securities exchanges, including the NYSE and Nasdaq (see Figure 2). The 432 federal securities class action suits filed in 2017 involved approximately 8.2% of publicly traded companies, nearly double the rate of 2014, when fewer than 4.2% of companies were subject to a securities class action.

Contrasting with the uptick in listed firm counts over the past five years, the longer-term trend is toward fewer publicly listed companies. Since passage of the PSLRA in 1995, the number of publicly listed companies in the United States has steadily declined by about 3,500, or by more than 40%. Recent research attributed this decline to fewer new listings and an increase in delistings, mostly through mergers and acquisitions.³

Figure 2. **Federal Filings and Number of Companies Listed on US Exchanges**
January 1996–December 2017



Note: Listed companies include those listed on the NYSE and Nasdaq. Listings data from 2016 and 2017 were obtained from World Federation of Exchanges (WFE). The 2017 listings data is as of November 2017. Data for prior years was obtained from Meridian Securities Markets and WFE.

Despite the drop in the number of listed companies, the average number of securities class action filings over the preceding five years, of about 235 per year, is still higher than the average filing rate of about 216 over the first five years after the PSLRA went into effect. The long-term trend toward fewer listed companies, coupled with an increased rate of class actions, implies that the average probability of a listed firm being subject to such litigation has increased from 3.2% for the 2000–2002 period to 8.2% in 2017.

Over the past two years, the higher average risk of federal securities class action litigation has been driven by dramatic growth in merger-objection cases, which were previously filed much more often in various state courts, but are now less so, given recent rulings discouraging filings in those jurisdictions. Hence the increase in the average firm's litigation risk might be lower than is indicated above, especially given that the risk of merger-objection litigation is limited to those planning or engaged in M&A activity. The average probability of a firm being targeted by what is often regarded as a "standard" securities class action—one that alleges violations of Rule 10b-5, Section 11, and/or Section 12—was only 4.1% in 2017; higher than the average probability of 3.0% between 2000 and 2002.

Filings by Type

In 2017, each of the major filing types currently tracked in NERA's securities class action database experienced growth (see Figure 3). The continued near-record overall growth rate was driven by a more than doubling of merger-objection filings for the second consecutive year. Federal merger-objection filings typically allege a violation of Section 14(a), 14(d), and/or 14(e) of the Securities and Exchange Act of 1934, and/or a breach of fiduciary duty by managers of the firm being acquired. Filings of standard securities cases were up by 11% over 2016, the fifth consecutive year of steady growth and the longest expansion on record.

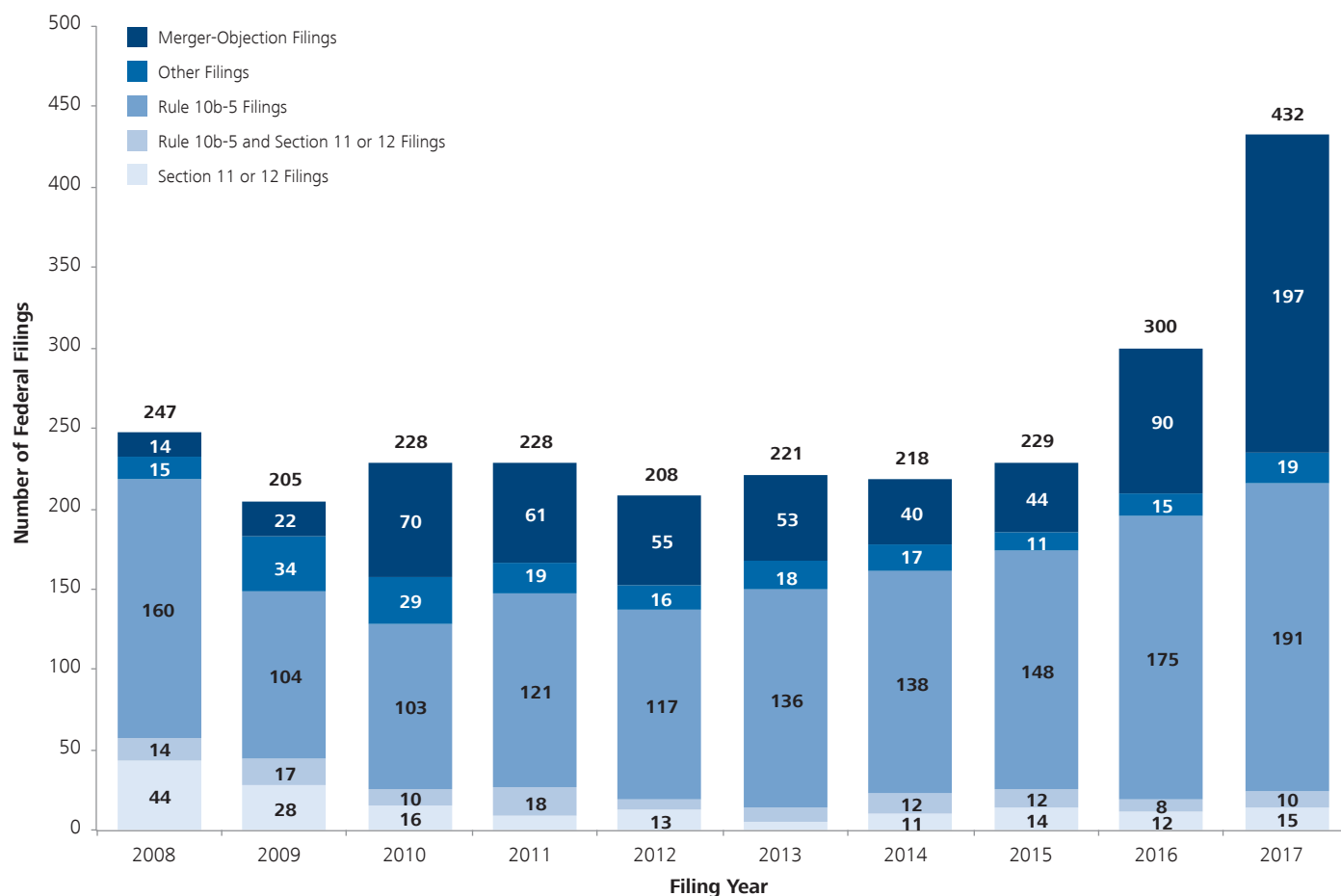
While standard filings still predominate in federal dockets, the 197 merger-objection cases constituted about 46% of all filings and were almost at parity with the 216 standard filings. The continued growth in merger objections likely stemmed from the filing of federal merger-objection suits that would have been filed in other jurisdictions but for various state-level decisions limiting "disclosure-only" settlements, with the most prominent of these being the 22 January 2016 *Trulia* decision in the Delaware Court of Chancery.⁴

Although aggregate merger-objection filings (including those at the state level) may correspond with the rate of merger and acquisitions, such deal activity does not appear to have historically been the primary driver of federal merger-objection filings over multiple years. The number of federal merger-objection filings generally fell between 2010 and 2015, despite increased M&A activity. The higher filing counts in 2016 and 2017 likely stemmed from trends in the choice of jurisdiction rather than trends in deal volume.⁵

On a quarterly basis, the filing of 90 standard cases in the first quarter of 2017 was two-thirds higher than in the fourth quarter of 2016 and the highest quarterly rate since 2001. Cases filed during the first quarter resembled filings over the remainder of the year. Coupled with slower filing rates in each of the latter three quarters, this may portend a slowdown in standard filings in early 2018.

Besides filings of standard cases and merger-objection cases, a variety of other filings rounded out 2017. Several filings alleged breaches of fiduciary duty (including cases regarding the safety of alternative investments and shareholder class rights), but we also saw filings related to alleged fraud in the sale of privately held securities in Uber, Inc.

Figure 3. **Federal Filings by Type**
January 2008–December 2017



Merger-Objection Filings

In 2017, federal merger-objection filings more than doubled for the second consecutive year (see Figure 4). While not matching the dramatic growth in filings in 2010, which did coincide with a doubling in M&A activity, the persistent increase in filings over the past two years overlapped with only marginal growth in M&A deal activity: a slowdown in 2016 was followed by a recovery in 2017.⁶ Rather, the jurisdiction where cases were brought and the attributes of target firms imply that this trend, in part, reflects forum selection by plaintiffs.

Historically, state courts, rather than federal courts, have served as the primary forum for merger-objection cases.⁷ Between 2010 and 2015, the slowdown in federal merger-objection filings largely mirrored the slowdown in multi-jurisdiction litigation, such as merger objections filed in multiple state courts. This trend, according to researchers, may be due to the increased use and effectiveness of forum selection corporate bylaws that limit the ability of plaintiffs to file claims outside of stipulated jurisdictions.⁸

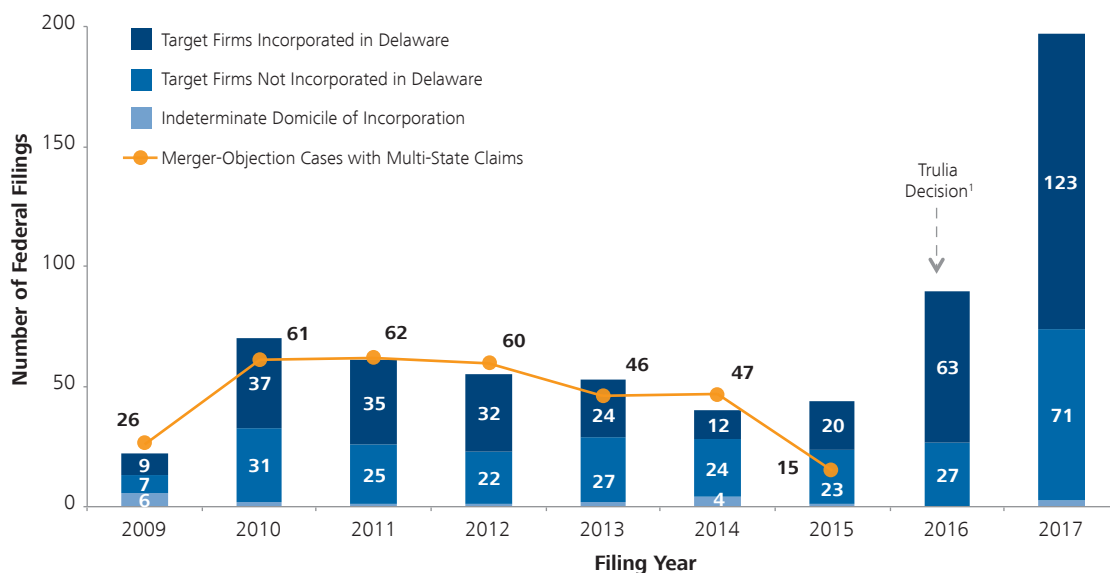
The increased adoption of forum selection bylaws coincided with various state court decisions in 2015 and 2016, particularly those against “disclosure-only” settlements, including the *Trulia* decision handed down by the Delaware Court of Chancery on 22 January 2016.⁹ Prior to the *Trulia* decision, the Delaware Court of Chancery attracted about half of eligible merger-objection cases.

Research suggested that the *Trulia* decision would drive merger objections to alternative jurisdictions, such as federal courts.¹⁰ This prediction has largely been borne out thus far. In 2016, more than 90% of the growth in federal merger-objection cases was associated with firms incorporated in Delaware. In 2017, firms incorporated in Delaware accounted for more than half of the annual growth in filings. The 2017 increase in federal filings targeting firms incorporated in Delaware was concentrated in the Third Circuit (of which Delaware is part), where 28% of merger objections were filed, and the Ninth Circuit, where 22% of such cases were filed.

Whether the movement of merger-objection suits out of Delaware persists will likely depend on the extent to which other jurisdictions adopt the Delaware Court of Chancery’s lead on disclosure-only settlement disapproval, as well as on the rate of corporate adoption of forum selection bylaws.¹¹ In the latter part of 2016, the Seventh Circuit ruled against a disclosure-only settlement in *In re: Walgreen Co. Stockholder Litigation*.¹² Unsurprisingly, the proportion of merger objections filed in the Seventh Circuit fell by more than 60% in 2017 versus 2016. In 2017, merger-objection cases filed in the Seventh Circuit were dismissed at nearly double the rate of other circuits.

In 2017, 71 federal merger-objection filings targeted firms not incorporated in Delaware, up from 27 in 2016. A quarter of the growth involved firms incorporated in Maryland and Minnesota, cases that made up nearly half of all merger objections targeting non-Delaware firms filed in the Fourth and Eighth Circuits. After Delaware, firms incorporated in Maryland were most frequently targeted in federal merger objections in both 2016 and 2017. This followed a 2013 decision in Maryland State Circuit Court rejecting a request for attorneys’ fees in a disclosure-only settlement.¹³

Figure 4. **Federal Merger-Objection Filings and Merger-Objection Cases with Multi-State Claims**
January 2009–December 2017



Notes: Counts of merger-objection cases with multi-state claims based on data obtained from Matthew Cain and Steven Solomon, “Takeover Litigation in 2015,” Berkeley Center for Law, Business and the Economy, 14 January 2016. Data on multi-state claims unavailable for 2016 or 2017. State of incorporation obtained from the Securities and Exchange Commission.

¹ *In re Trulia, Inc. Stockholder Litigation*, C.A. No. 10020-CB (Del. Ch. Jan. 22, 2016).

Filings Targeting Foreign Companies

Foreign companies continued to be disproportionately targeted in “standard” securities class actions in 2017.¹⁴ Despite making up a relatively stable share of listings, foreign companies’ share of filings increased for a fourth consecutive year and such filings made up more than a quarter of all standard filings (see Figure 5).

In 2017, there were 55 standard filings against foreign companies, a 25% increase over 2016 and more than a 50% increase over 2015. Recent growth in filings has been driven by alleged regulatory violations. The number of such cases increased by more than 80% in 2017, which followed more than a 50% increase in 2016. In 2017, more than a third of filings against foreign companies alleged regulatory violations.

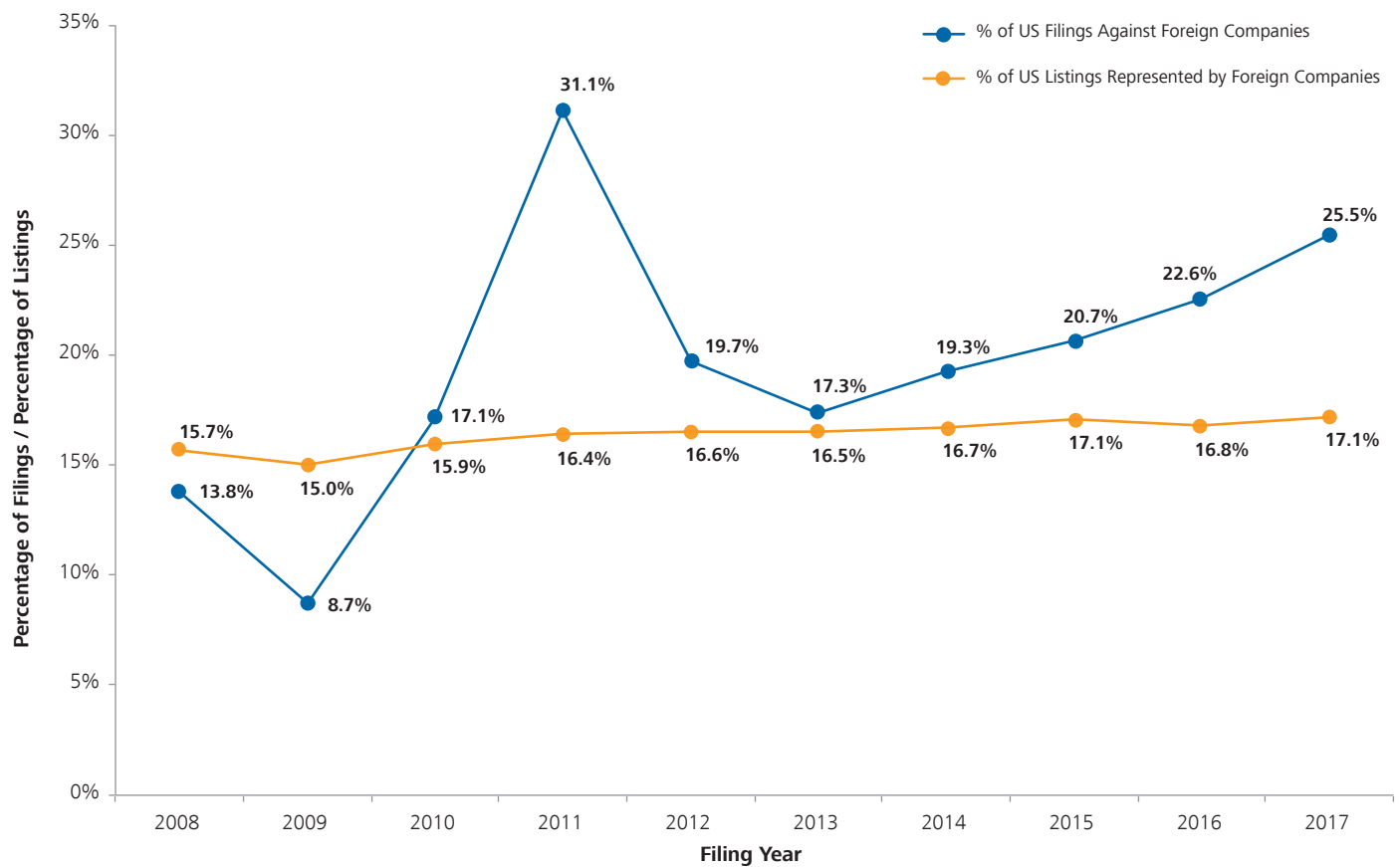
Filings against foreign companies spanned several economic sectors, with more than 20% targeting firms in the Health Technology and Services Sector (down from more than 25% in 2016). Half of filings against companies in this sector alleged regulatory violations. Over the last five years, the percentage of filings against foreign companies in the Electronic Technology and Technology Services Sector has persistently fallen, from more than 30% of all filings in 2013 to about 8% in 2017.

In 2011, a record 31% of filings targeted foreign companies, mostly due to a surge in litigation against Chinese companies, which was mainly related to a proliferation in so-called *reverse mergers* years earlier. A reverse merger is one whereby a company orchestrates a merger with a publicly traded company listed in the US, thereby enabling access to US capital markets without going through the process of obtaining a new listing.

Merger-objection claims infrequently target foreign companies.¹⁵ In 2017, there were four merger-objection claims against foreign companies (up from two in 2016). These represent 2% of all merger objections, and about 7% of all filings against foreign companies.

Figure 5. **Foreign Companies: Share of Filings and Share of Companies Listed on US Exchanges**

Shareholder Class Actions with Alleged Violations of Rule 10b-5, Section 11, or Section 12
January 2008–December 2017

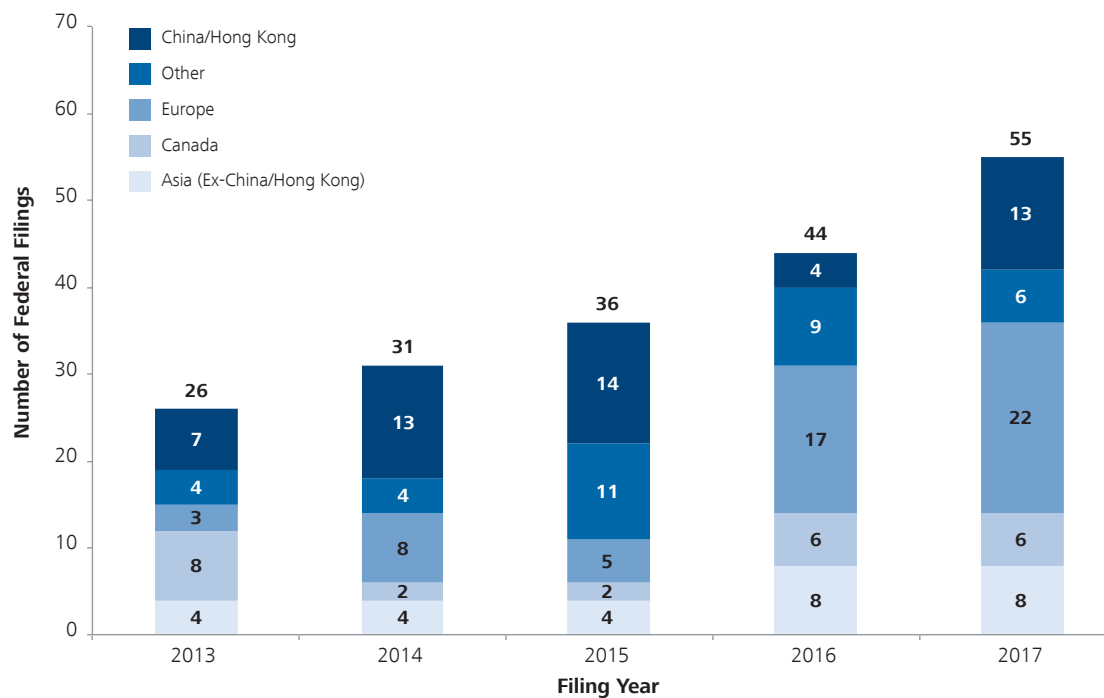


Note: Foreign company status based on country of principal executive offices.

Geographically, growth in standard filings against foreign companies in 2017 was driven by claims against European and Chinese firms (see Figure 6). The number of filings against European firms grew for the second consecutive year, while claims against Chinese firms were resurgent. Over the past five years, filings targeting European firms have overtaken those against Chinese firms. This may be due to a recent tendency for Chinese companies to delist from US exchanges and relist their shares in Chinese markets, which historically have had higher relative valuations.¹⁶ In addition to reducing the overall count of listed Chinese companies in the United States, such a relisting mechanism is more likely to be taken advantage of by firms with relatively weak accounting or disclosure practices.

Figure 6. **Filings Against Foreign Companies**

Shareholder Class Actions with Alleged Violations of Rule 10b-5, Section 11, or Section 12 by Region
January 2013–December 2017



Note: Foreign company status based on country of principal executive offices.

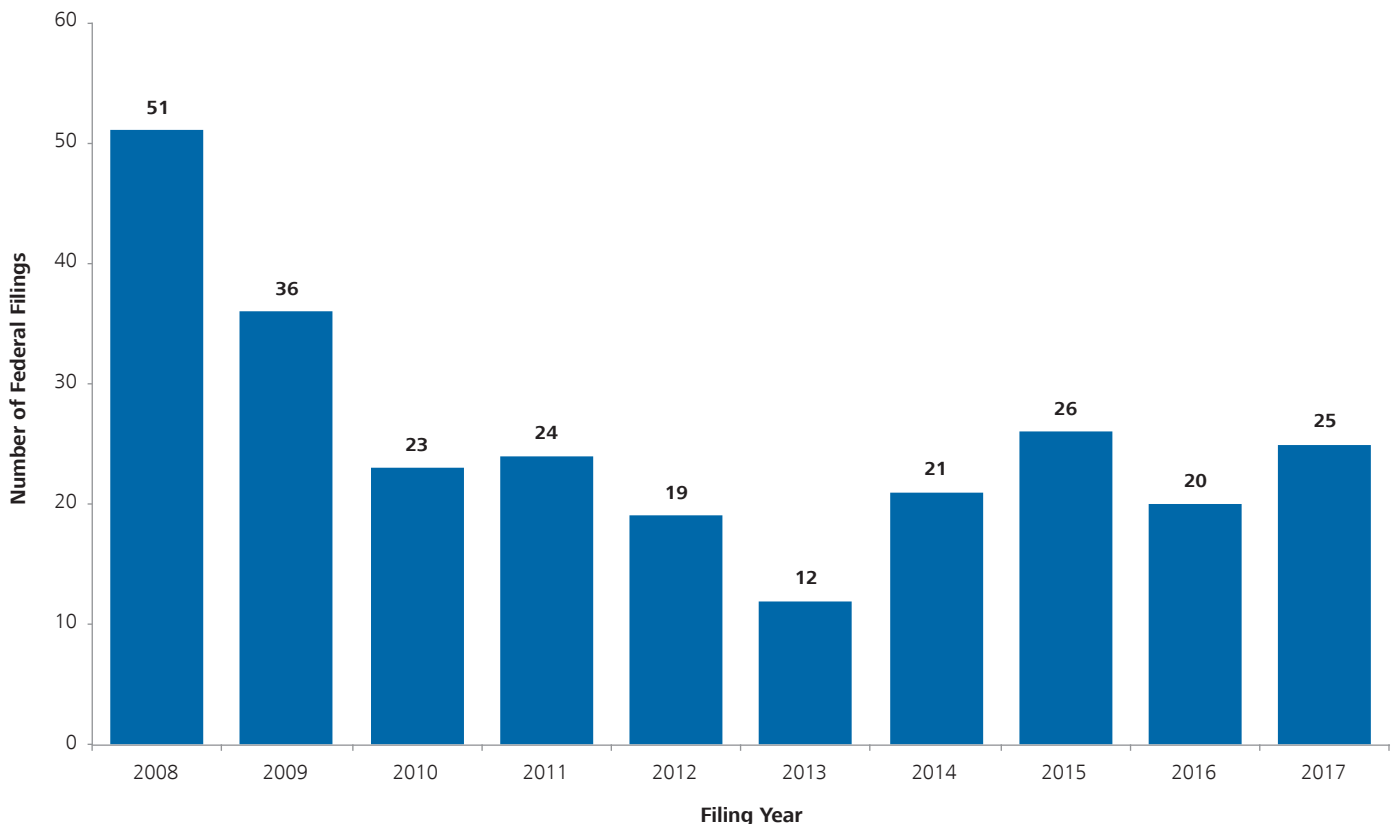
Section 11 Filings

There were 25 federal filings alleging violations of Section 11 in 2017 (see Figure 7). This is approximately the average rate since 2014, a year described by the *Financial Times* as a “bumper IPO year” that precipitated an uptick in Section 11 filings.¹⁷ IPO activity has since declined, falling by more than 40% between 2014 and 2017.¹⁸

In 2017, Section 11 filings, which spanned multiple economic sectors, were concentrated in the Second and Third Circuits. Filings in the Ninth Circuit were proportionally underrepresented in 2017, accounting for about 60% of the average proportion since 2008.

While potentially just an anomaly, the slowdown in Section 11 litigation in the Ninth Circuit may stem from plaintiffs’ filing Section 11 claims in California state courts, perceived as being relatively plaintiff-friendly, in lieu of federal courts.¹⁹ Two factors may reverse this trend in coming years. First, several firms have recently required that Section 11 claims be filed in federal courts.²⁰ Second, on 27 June 2017, the US Supreme Court granted certiorari in *Cyan, Inc. v. Beaver County Employees Retirement Fund*, to decide whether state courts have jurisdiction over class actions with claims under the Securities Act of 1933, including Section 11 claims.²¹

Figure 7. **Federal Section 11 Filings**
January 2008–December 2017



Aggregate NERA-Defined Investor Losses

In addition to the number of cases filed, we also consider the total potential size of these cases using a metric we label “NERA-defined Investor Losses.”

NERA’s Investor Losses variable is a proxy for the aggregate amount that investors lost from buying the defendant’s stock, rather than investing in the broader market during the alleged class period. Note that the Investor Losses variable is not a measure of damages because any stock that underperforms the S&P 500 would have Investor Losses over the period of underperformance; rather, it is a rough proxy for the relative size of investors’ potential claims. Historically, Investor Losses have been a powerful predictor of settlement size. Investor Losses can explain more than half of the variance in the settlement values in our database.

We do not compute NERA-defined Investor Losses for all cases included in this publication. For instance, class actions in which only bonds and not common stock are alleged to have been damaged are not included. The largest excluded groups are IPO laddering cases and merger-objection cases.

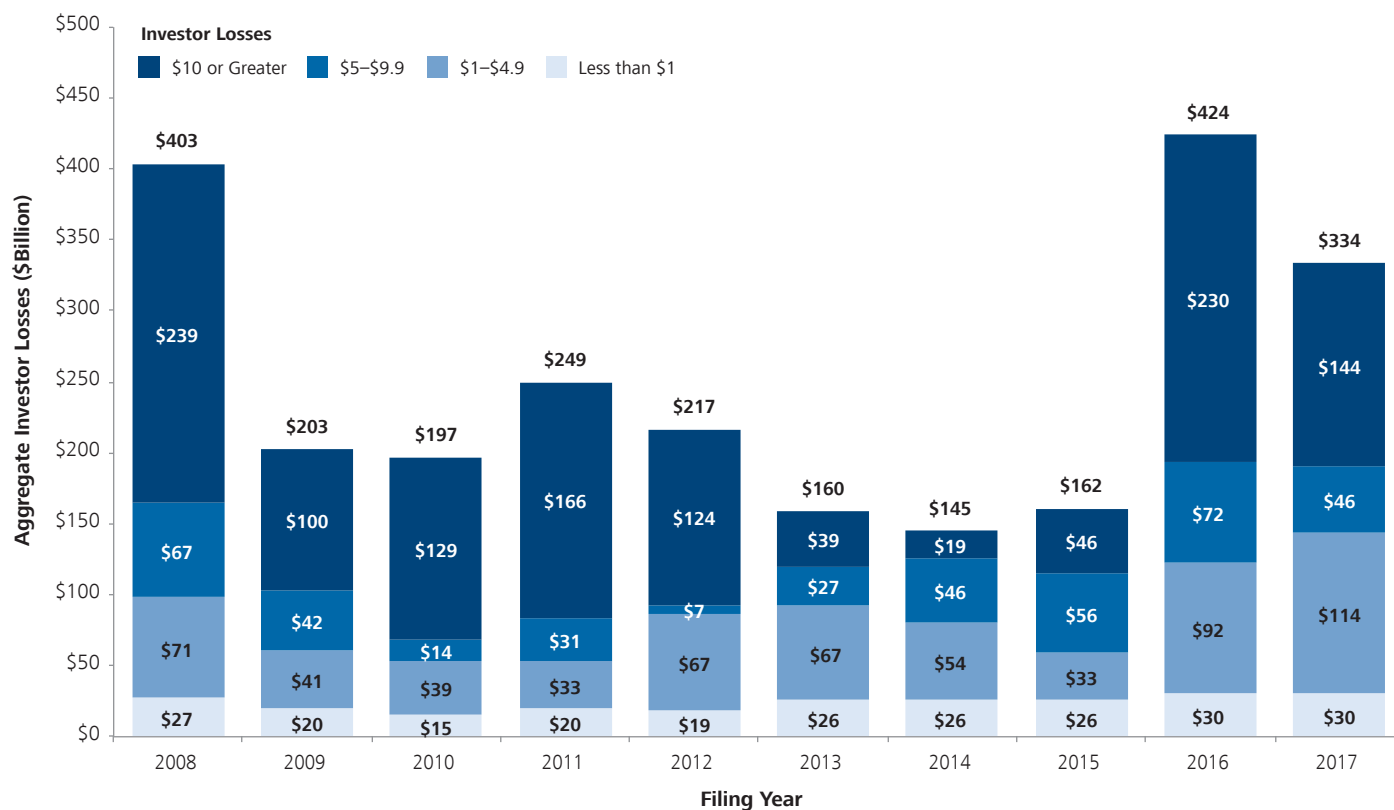
In 2017, aggregate NERA-defined Investor Losses (a measure of case size) was \$334 billion; 50% more than the five-year average of \$222 billion (see Figure 8). The increase in total case size since 2015 was due to a tripling of filings with Investor Losses between \$1 billion and \$5 billion, and a jump in filings with very large Investor Losses (over \$10 billion).

Although down from the 2016 record, 2017 marked the second year in a row since 2008 in which NERA-defined Investor Losses exceeded \$300 billion. Like in 2016, the high level of Investor Losses in 2017 stemmed from the number and size of filings claiming regulatory violations (i.e., those alleging a failure to disclose a regulatory issue), which totaled \$163 billion. Five of the eight cases in the largest strata of Investor Losses alleged regulatory violations.

A considerable share of NERA-defined Investor Losses in 2016 were tied to two major industrial antitrust investigations. The fact that these were one-off events suggested that aggregate case size would fall back considerably in 2017.²² Although total Investor Losses did decline in 2017, the metric was still more than double that of 2015 due to more filings (especially of cases with \$1 to \$5 billion in Investor Losses), and, in particular, more regulatory filings. This indicates that filings alleging regulatory violations, which tend to have higher Investor Losses, are becoming more broadly based and potentially a stronger driver of Investor Losses going forward. Details of filings alleging regulatory violations are discussed in the *Allegations* section below.

Excluding regulatory claims, aggregate NERA-defined Investor Losses were \$171 million, down from \$262 million in 2016. Notable cases with very large Investor Losses that did not allege regulatory violations included a data breach case against Yahoo! Inc. and a case against Facebook, Inc. related to disclosure of customer video screening times.

Figure 8. **Aggregate NERA-Defined Investor Losses (\$Billion)**
 Shareholder Class Actions with Alleged Violations of Rule 10b-5, Section 11, or Section 12
 January 2008–December 2017



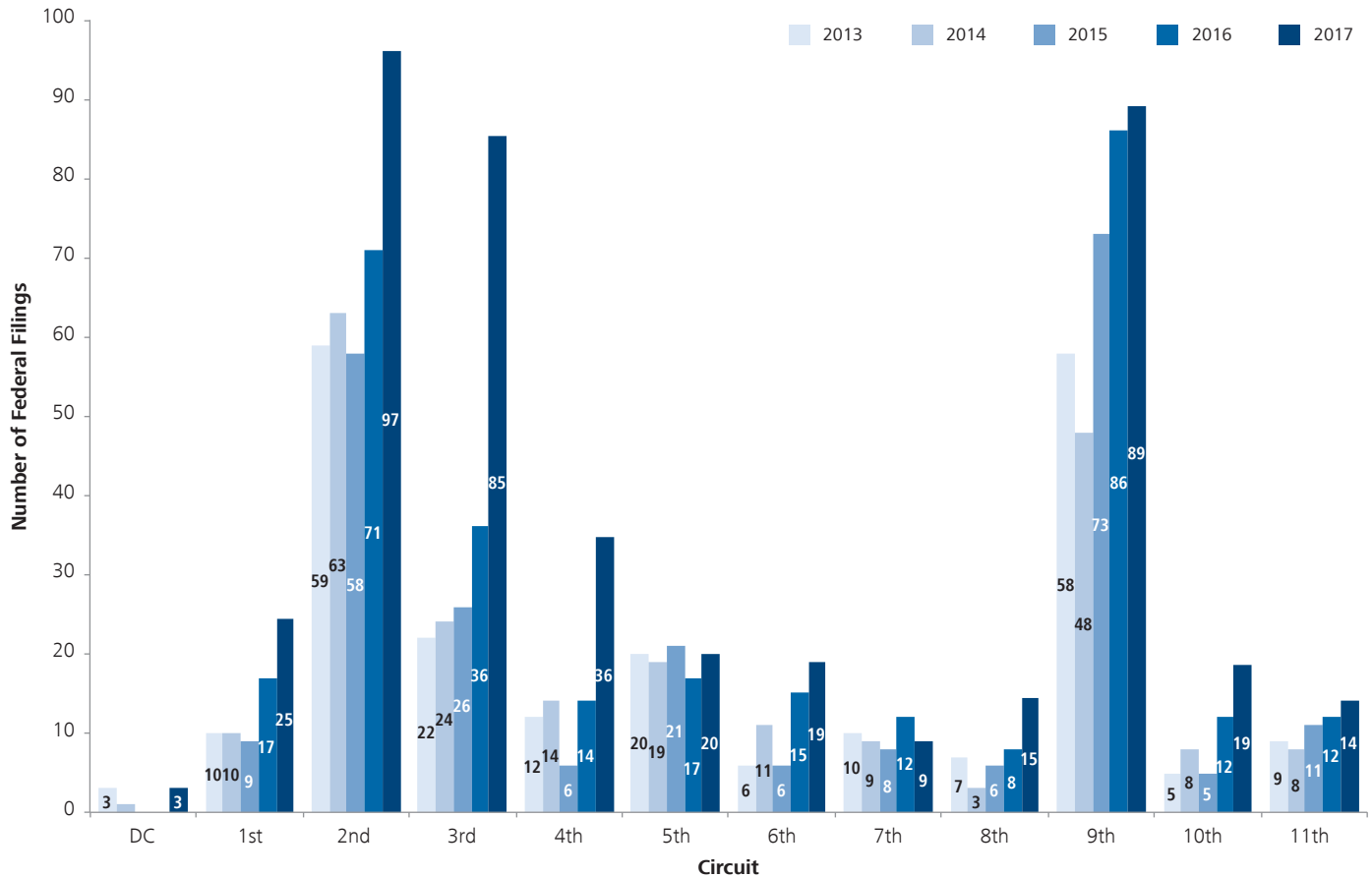
Filings by Circuit

In 2017, filings increased in every federal circuit except the Seventh Circuit, primarily due to the jump in federal merger-objection cases (see Figure 9). Although the Second and Ninth Circuits continued to have the most filings, rapid growth in merger objections accounted for the vast majority of filings in the First, Third, and Fourth Circuits, with filings more than doubling in the Third and Fourth Circuits.

Excluding merger objections, filings in the Second Circuit grew by a third to 84, contrasting with the Ninth Circuit, in which non-merger-objection filings fell by 12% to 51. As in the past, non-merger-objection filings in the Ninth Circuit were dominated by claims against firms in the Electronic Technology and Technology Services Sector. There was also a 60% jump in non-merger-objection cases in the Third Circuit. As in the past, the Third Circuit was subject to a disproportionate number of claims in the Health Technology and Services Sector (despite a general slowdown in such filings). This was mostly driven by the fact that the Third Circuit has a higher proportion of firms in the Pharmaceutical Preparations industry (SIC code 2834), an industry that dominates filings in Health Technology and Services Sector.²³

The number of merger-objection filings quadrupled in the Third Circuit, which includes Delaware. However, acceleration in the number of such filings was greatest in the Eighth Circuit, where the sharpest increase was seen among firms incorporated in Minnesota. The Seventh Circuit is the only circuit where merger-objection filings fell, which follows its 2016 ruling against disclosure-only settlements.²⁴ Despite remarkable growth in merger objections in certain circuits, it may be too early to identify the circuits that would be most likely to accommodate such filings. Rather, growth in merger-objection filings at the circuit level is likely more reflective of opposition to such filings at the state level.

Figure 9. **Federal Filings by Circuit and Year**
January 2013–December 2017



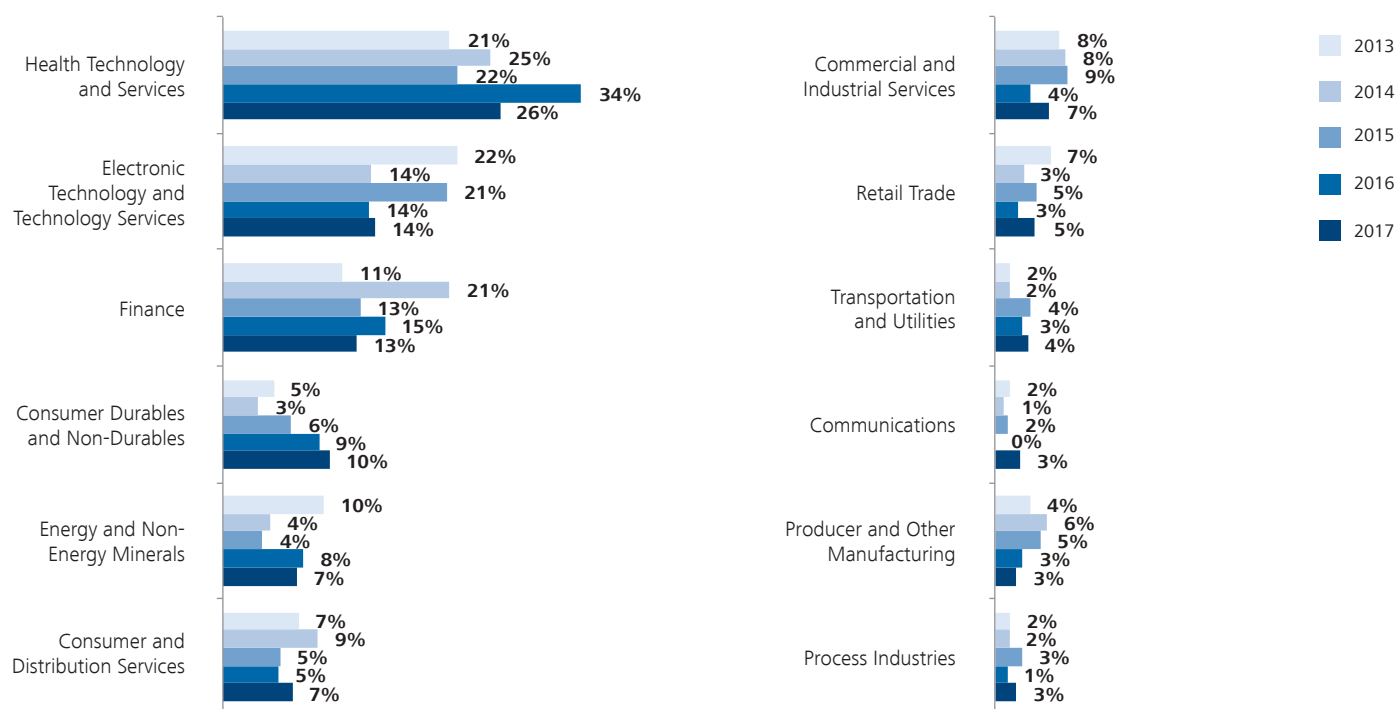
Filings by Sector

In 2017, filing counts were highest in the three historically dominant sectors, which include firms involved in health care, technology, and financial services (see Figure 10). However, the share of filings in these sectors fell from 63% in 2016 to 53% in 2017.

Claims against firms in the Health Technology and Services Sector were again dominated by filings against firms in the Pharmaceutical Preparations industry (SIC code 2834), which constituted about 63% of filings in the sector. A rise in the number of filings against firms in the Commercial and Industrial Services Sector coincided with an increase in filings alleging regulatory violations and misleading future performance, both of which targeted firms in that sector.

Of industries with more than 25 publicly traded companies, the industry with the highest percentage of US companies targeted by litigation was the Motor Vehicles and Equipment industry (SIC 371), where 10% of firms were targeted. Nine percent of firms in the Telephone Communications industry (SIC 481) faced litigation, while more than 8% of firms in the Drugs industry (SIC 283) were targeted. Due to alleged manipulative financing schemes by Kalani Investments Limited affecting multiple Greek shipping companies, filings targeted 8% of firms in the Deep Sea Foreign Transport of Freight industry (SIC 441).

Figure 10. **Percentage of Federal Filings by Sector and Year**
Excluding Merger-Objection Cases
January 2013–December 2017



Note: This analysis is based on the FactSet Research Systems Inc. economic sector classification. Some of the FactSet economic sectors are combined for presentation.

Allegations

In 2017, the number of cases alleging regulatory violations increased for the second consecutive year (see Figure 11). The filing of 56 regulatory cases was 43% higher than 2016, and accounted for about 26% of standard filings in 2017. Such cases accounted for a total of \$163.2 billion in NERA-defined Investor Losses, or nearly half of the 2017 total, compared with \$161.7 billion in Investor Losses in 2016, or about 38% of the 2016 total.

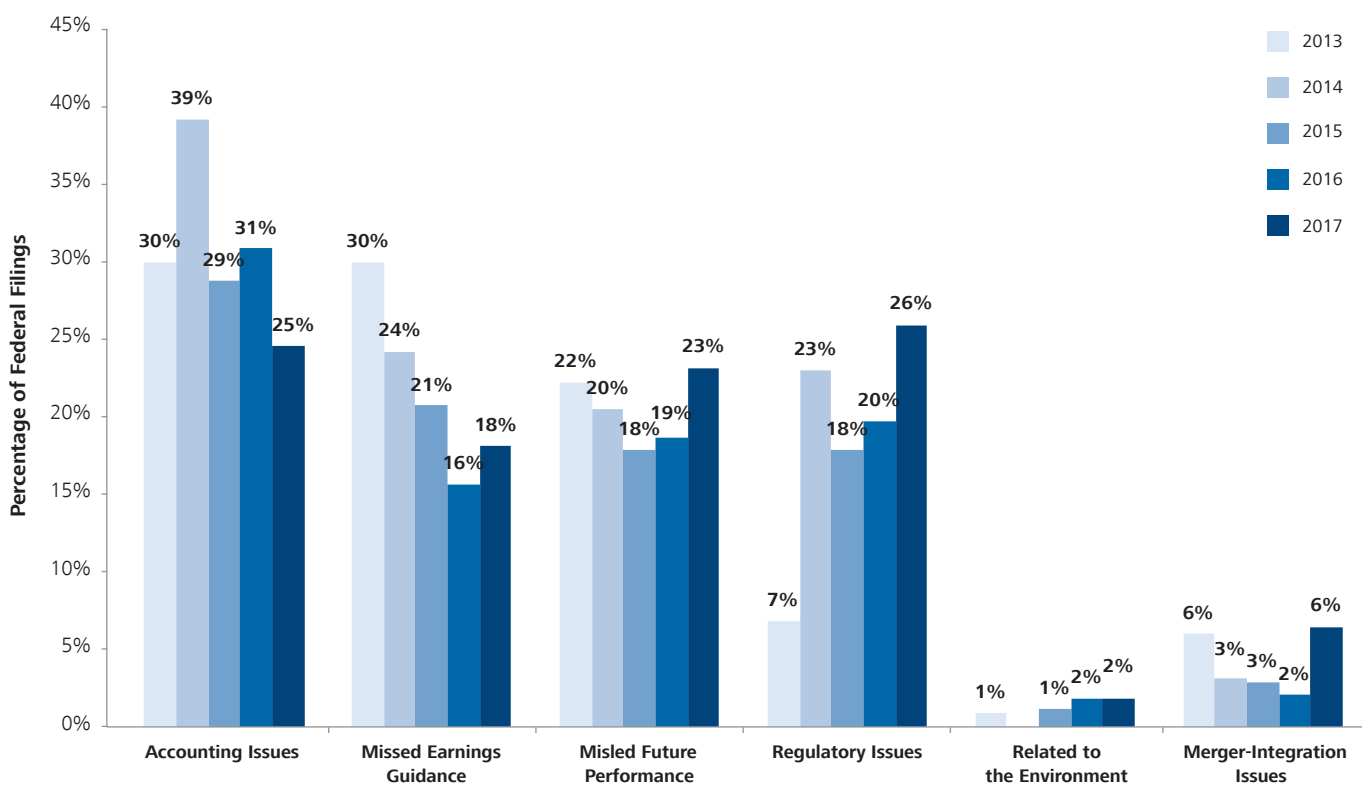
In 2017, we witnessed the filing of large cases alleging regulatory violations that spanned multiple industries. In 2016, two widespread investigations into two industries accounted for nearly 80% of NERA-defined Investor Losses tied to regulatory violations (about \$127 billion).²⁵ However, in 2017, not only did cases alleging regulatory violations account for more Investor Losses, but those Investor Losses were distributed across more cases and industries. Median NERA-defined Investor Losses for regulatory cases were also higher, increasing from \$250 million over the 2014-2015 period to \$1.05 billion over the 2016-2017 period. The largest regulatory cases involved several industries and included allegations related to safety recalls, emissions defeat devices, customer account creation, and antitrust violations.

The number of filings alleging misleading future performance rose for the second consecutive year. Such allegations are more frequent in the Health Technology and Services Sector, and particularly in the Pharmaceutical Preparations industry (SIC code 2834), which sees many cases related to drug development.

Most complaints include a wide variety of allegations, not all of which are depicted here. Due to multiple types of allegations in complaints, the same case may be included in multiple categories.

Figure 11. **Types of Misrepresentations Alleged**

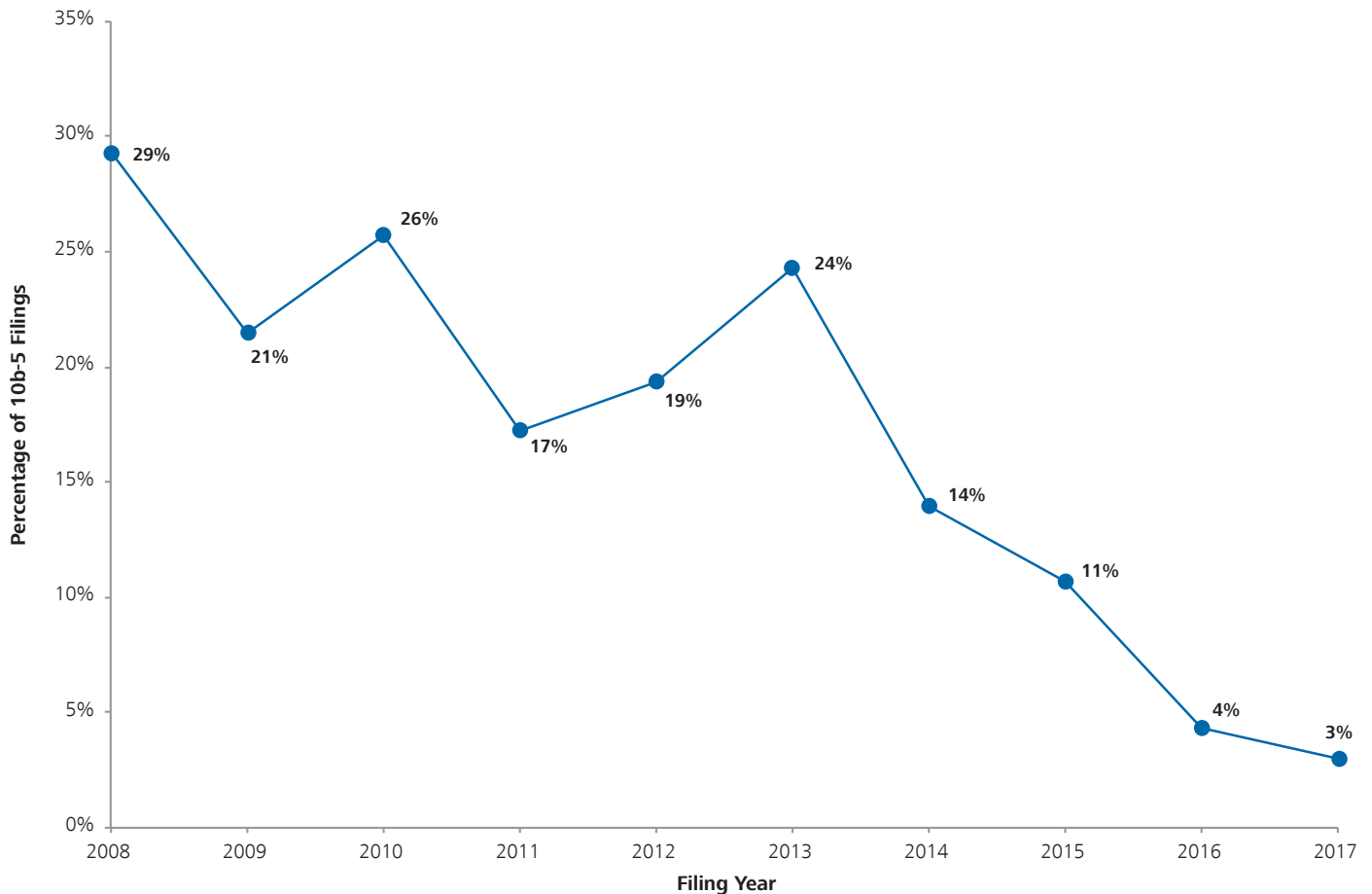
Shareholder Class Actions with Alleged Violations of Rule 10b-5, Section 11, or Section 12
January 2013–December 2017



Alleged Insider Sales

The percentage of Rule 10b-5 class actions that alleged insider sales continued to decrease in 2017, dropping to 3% and marking a fourth consecutive record low (see Figure 12). Cases alleging insider sales were more common in the aftermath of the financial crisis, when a quarter of filings included insider trading claims. In 2005, half of Rule 10b-5 class actions filed included such claims.

Figure 12. **Percentage of Rule 10b-5 Filings Alleging Insider Sales by Filing Year**
January 2008–December 2017



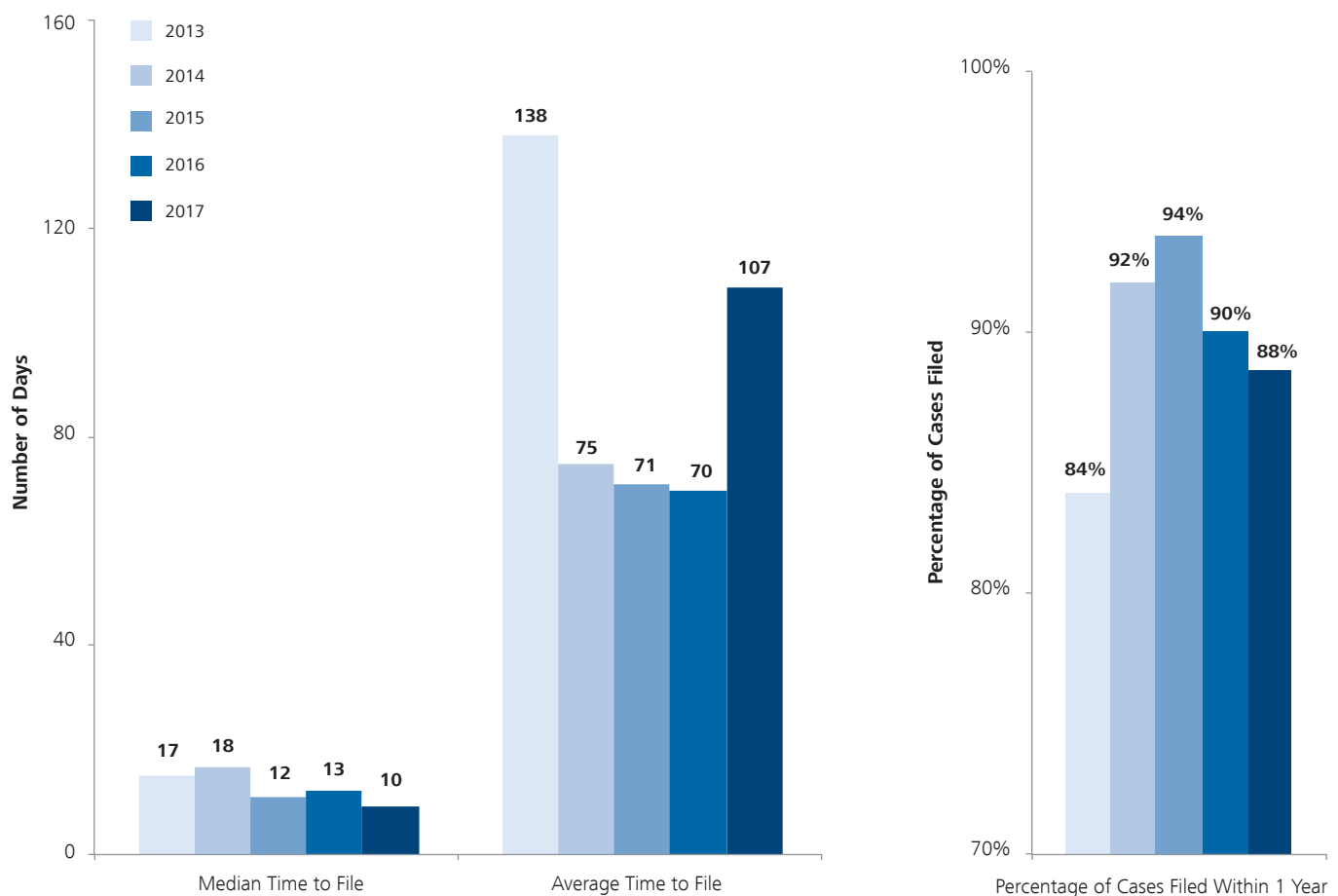
Time to File

The term “time to file” denotes the time that has elapsed between the end of the alleged class period and the filing date of the first complaint. Figure 13 illustrates how the median time and average time to file (in days) have changed over the past five years.

The median time to file fell to a record low of 10 days in 2017, indicating that it took 10 days or less to file a complaint in 50% of cases. This shows a lower frequency of cases with long periods of time between when an alleged fraud was revealed and the filing of a related claim. While the median time to file continued to drop, the average time was affected by 10 cases with very long filing delays. One case against Rio Tinto, regarding the valuation of mining assets in Mozambique, took more than 4.5 years to file and boosted the average time to file by nearly 9%.²⁶

Despite the small minority of cases with very long times to file, the data generally point toward a lower incidence of cases with long periods between the date of discovery of an alleged fraud and the date when a related claim is filed.

Figure 13. **Time to File Rule 10b-5 Cases from End of Alleged Class Period to File Date**
January 2013–December 2017



Note: Excludes cases where the alleged class period could not be unambiguously determined.

Analysis of Motions

NERA's statistical analysis has found robust relationships between settlement amounts and the stage of the litigation at which settlements occur. We track filings and decisions on three types of motions: motion to dismiss, motion for class certification, and motion for summary judgment. For this analysis, we include securities class actions in which purchasers of common stock are part of the class and in which a violation of Rule 10b-5, Section 11, or Section 12 is alleged.

As shown in the below figures, we record the status of any motion as of the resolution of the case. For example, a motion to dismiss which had been granted but was later denied on appeal is recorded as denied, even if the case settles without the motion being filed again.

Motions for summary judgment were filed by defendants in 7.5%, and by plaintiffs in only 2.2%, of the securities class actions filed and resolved over the 2000–2017 period, among those we tracked.²⁷

Outcomes of motions to dismiss and motions for class certification are discussed below.

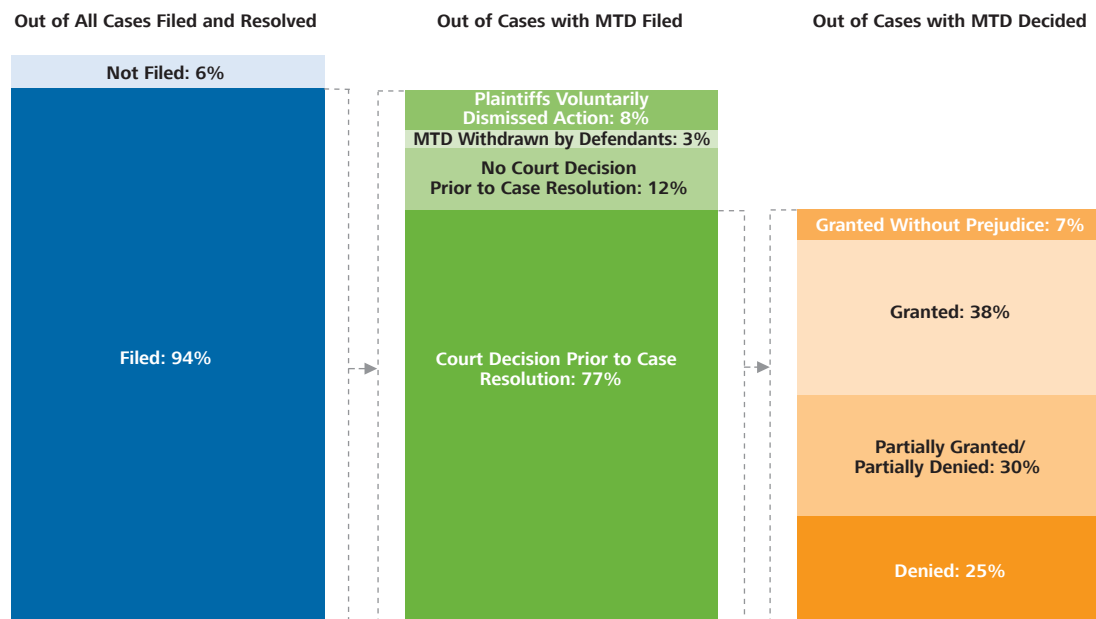
Motion to Dismiss

A motion to dismiss was filed in 94% of the securities class actions tracked. However, the court reached a decision on only 77% of the motions filed. In the remaining 23% of cases in which a motion to dismiss was filed, either the case resolved before a decision was reached, plaintiffs voluntarily dismissed the action, or the motion to dismiss itself was withdrawn by defendants (see Figure 14).

Out of the motions to dismiss for which a court decision was reached, the following three outcomes capture all of the decisions: granted with or without prejudice (45%), granted in part and denied in part (30%), and denied (25%).

Figure 14. **Filing and Resolutions of Motions to Dismiss**

Shareholder Class Actions with Alleged Violations of Rule 10b-5, Section 11, or Section 12
Excluding IPO Laddering Cases
Cases Filed and Resolved January 2000–December 2017

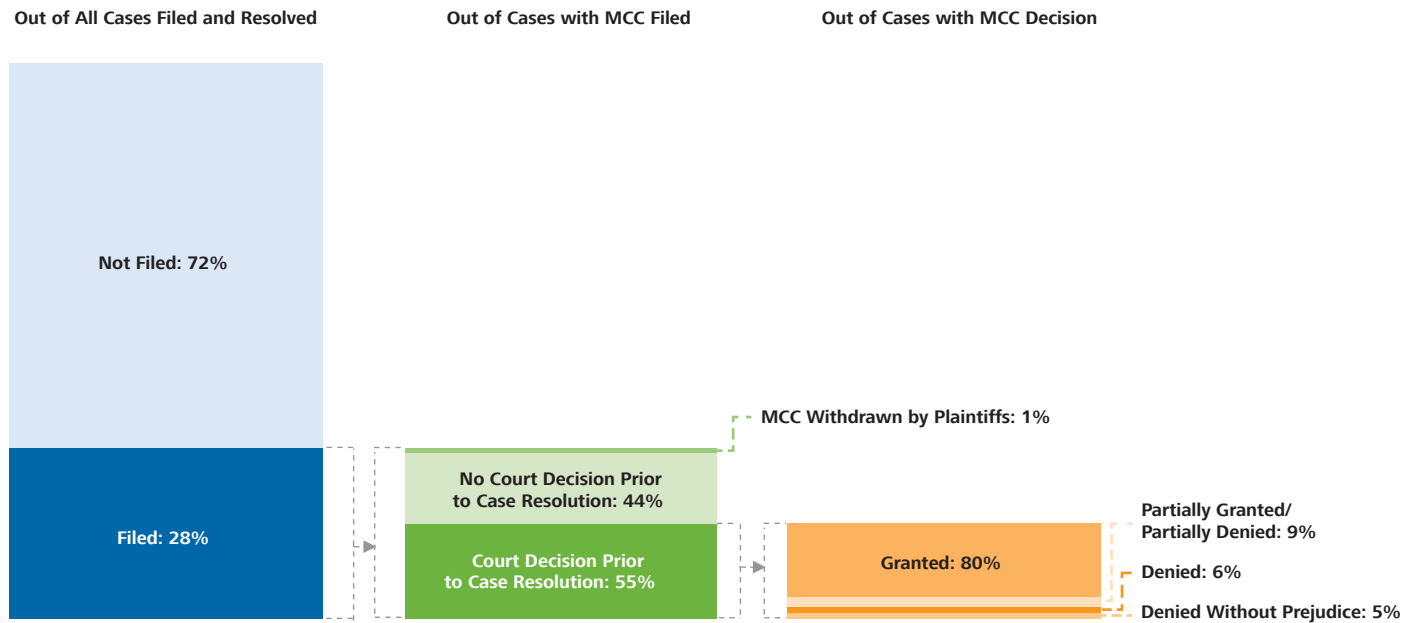


Note: Includes cases in which holders of common stock are part of the class.

Motion for Class Certification

Most cases were settled or dismissed before a motion for class certification was filed: 72% of cases fell into this category. Of the remaining 28%, the court reached a decision in only 55% of the cases in which a motion for class certification was filed. Overall, only 15% of the securities class actions filed (or 55% of the 28%) reached a decision on the motion for class certification (see Figure 15). According to our data, 89% of the motions for class certification that were decided were granted in full or partially.

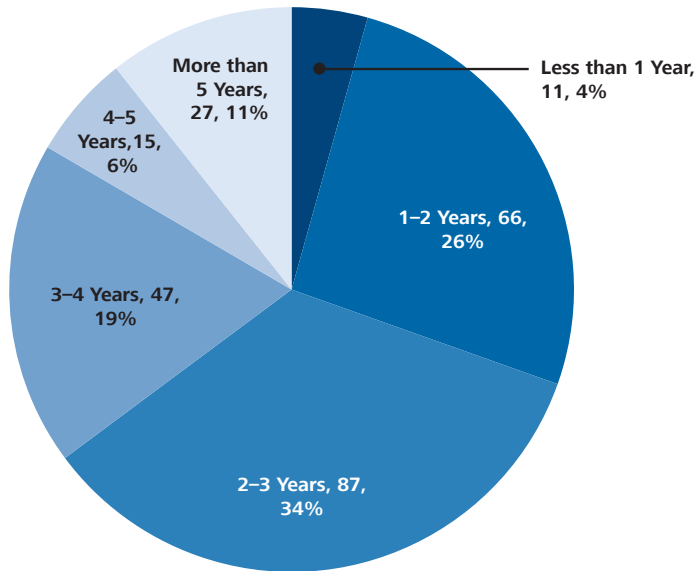
Figure 15. **Filing and Resolutions of Motions for Class Certification**
 Shareholder Class Actions with Alleged Violations of Rule 10b-5, Section 11, or Section 12
 Excluding IPO Laddering Cases
 Cases Filed and Resolved January 2000–December 2017



Note: Includes cases in which holders of common stock are part of the class.

Approximately 65% of the decisions handed down on motions for class certification were reached within three years from the original filing date of the complaint (see Figure 16). The median time was about 2.5 years.

Figure 16. **Time from First Complaint Filing to Class Certification Decision**
 Shareholder Class Actions with Alleged Violations of Rule 10b-5, Section 11, or Section 12
 Excluding IPO Laddering Cases
 Cases Filed and Resolved January 2000–December 2017



Note: Includes cases in which holders of common stock are part of the class.

Trends in Case Resolutions

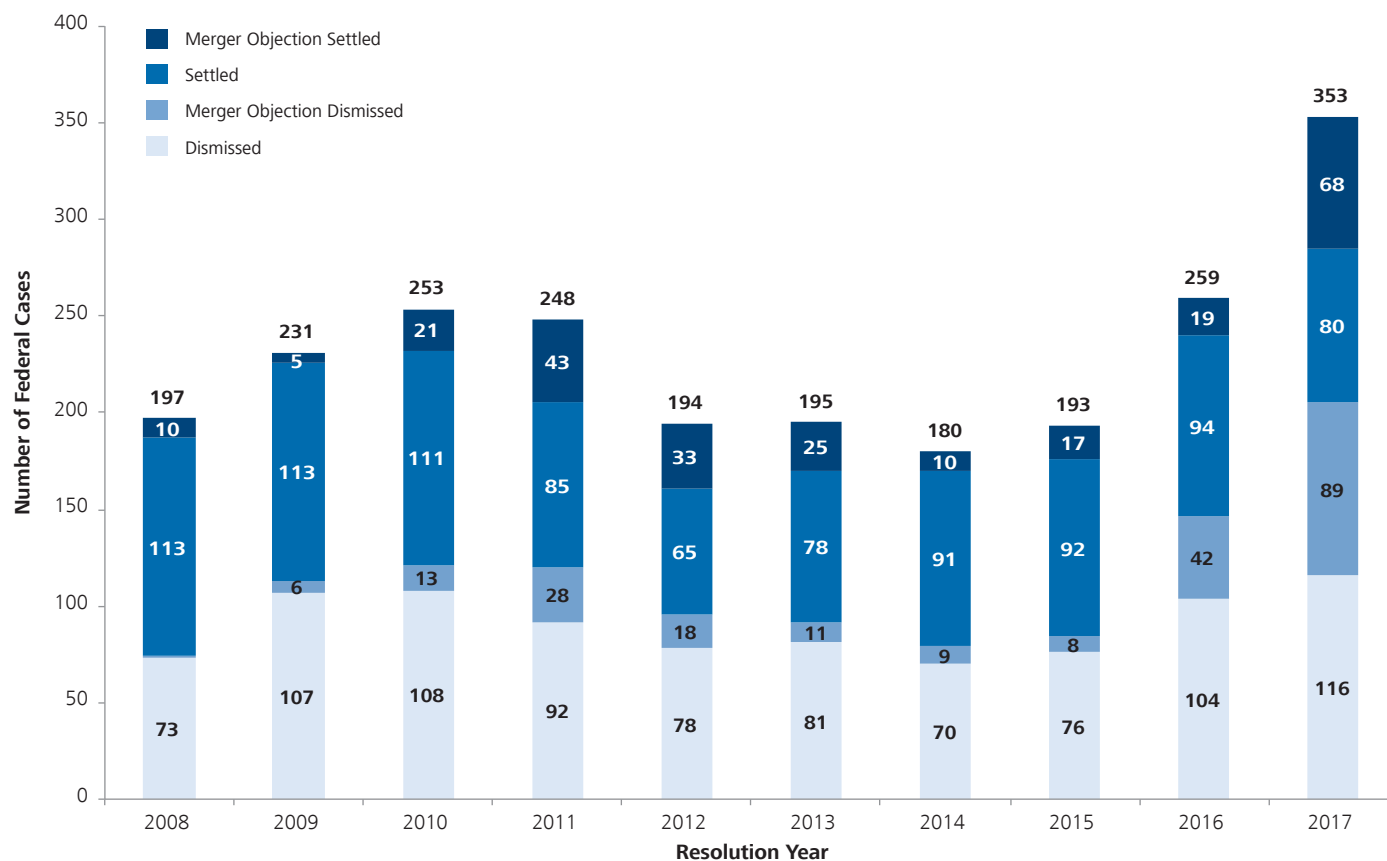
Number of Cases Settled or Dismissed

In 2017, 353 securities class actions were resolved, which is a post-PSLRA record high (see Figure 17). Of those, 148 cases settled, approaching the record 150 in 2007. The number of settlements was up by more than 30% over 2016, when 113 cases settled. A record 205 cases were dismissed in 2017, which marked the second consecutive year (and second year since the PSLRA became law) in which more cases were dismissed than settled. More than 40% of cases dismissed in 2017 were done so within a year of filing, the fastest pace since the passage of the PSLRA.

As with filings of securities class actions, case resolution statistics were affected by the surge in federal merger-objection cases. Merger objections made up 30% of all active cases during 2017, but constituted 43% of dismissals and 46% of settlements.²⁸ Moreover, of merger-objection cases dismissed in 2017, 89% were done so within one year of filing, compared with 29% for non-merger-objections cases.²⁹

Beside merger-objection cases, most securities class actions in NERA's database allege violations of Rule 10b-5, Section 11, and/or Section 12, and are often regarded as "standard" securities class actions.³⁰ There were 116 dismissals of such cases in 2017, a record high. Contrasting with the record high number of dismissals, only 80 cases settled, near the 2012 record post-PSLRA low. In 2017, settlements of non-merger-objection cases constituted less than 41% of all case resolutions, a post-PSLRA low.

Figure 17. **Number of Resolved Cases: Dismissed or Settled**
January 2008–December 2017



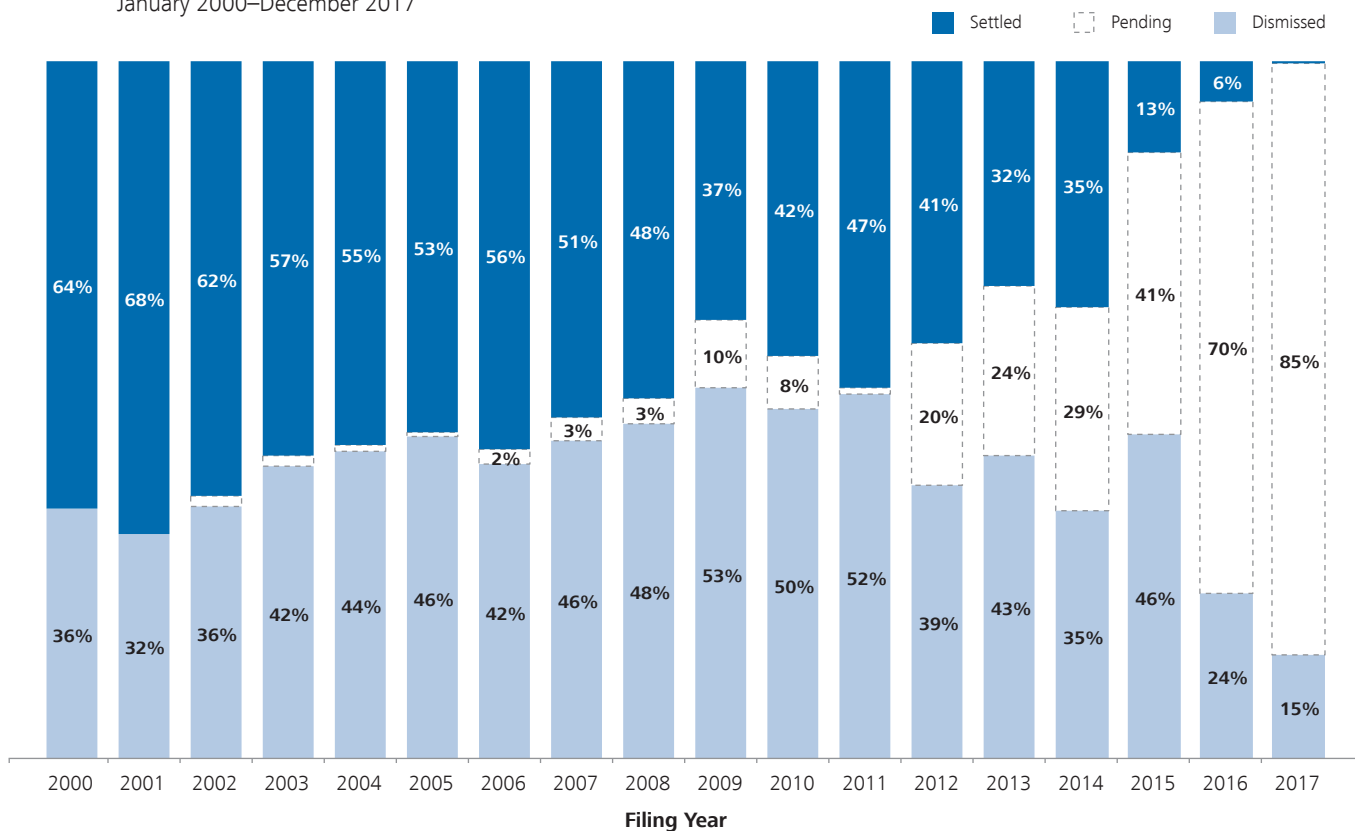
Case Status by Year

Figure 18 shows the current resolution status of cases by filing year. Each percentage in the figure represents the current resolution status of cases filed in each year as a proportion of all cases filed in that year. IPO laddering cases are excluded, as are merger-objection cases, and verdicts.

Historically, more cases settled than were dismissed. However, the rate of case dismissal has steadily increased. While only about a third of cases filed between 2000 and 2002 were dismissed, in 2011, the most recent year with substantial resolution data, about half of cases filed were dismissed.³¹

While dismissal rates have been climbing since 2000, at least until 2011, the ultimate dismissal rate for cases filed in more recent years is less certain. On one hand, it may increase further, as there are more pending cases awaiting resolution. On the other hand, it may decrease because recent dismissals have more potential than older ones to be appealed or re-filed, and cases that were recently dismissed without prejudice may ultimately result in settlements.

Figure 18. **Status of Cases as Percentage of Federal Filings by Filing Year**
Excluding Merger Objections and IPO Laddering Cases and Verdicts
January 2000–December 2017



Note: Dismissals may include dismissals without prejudice and dismissals under appeal.

Number of Cases Pending

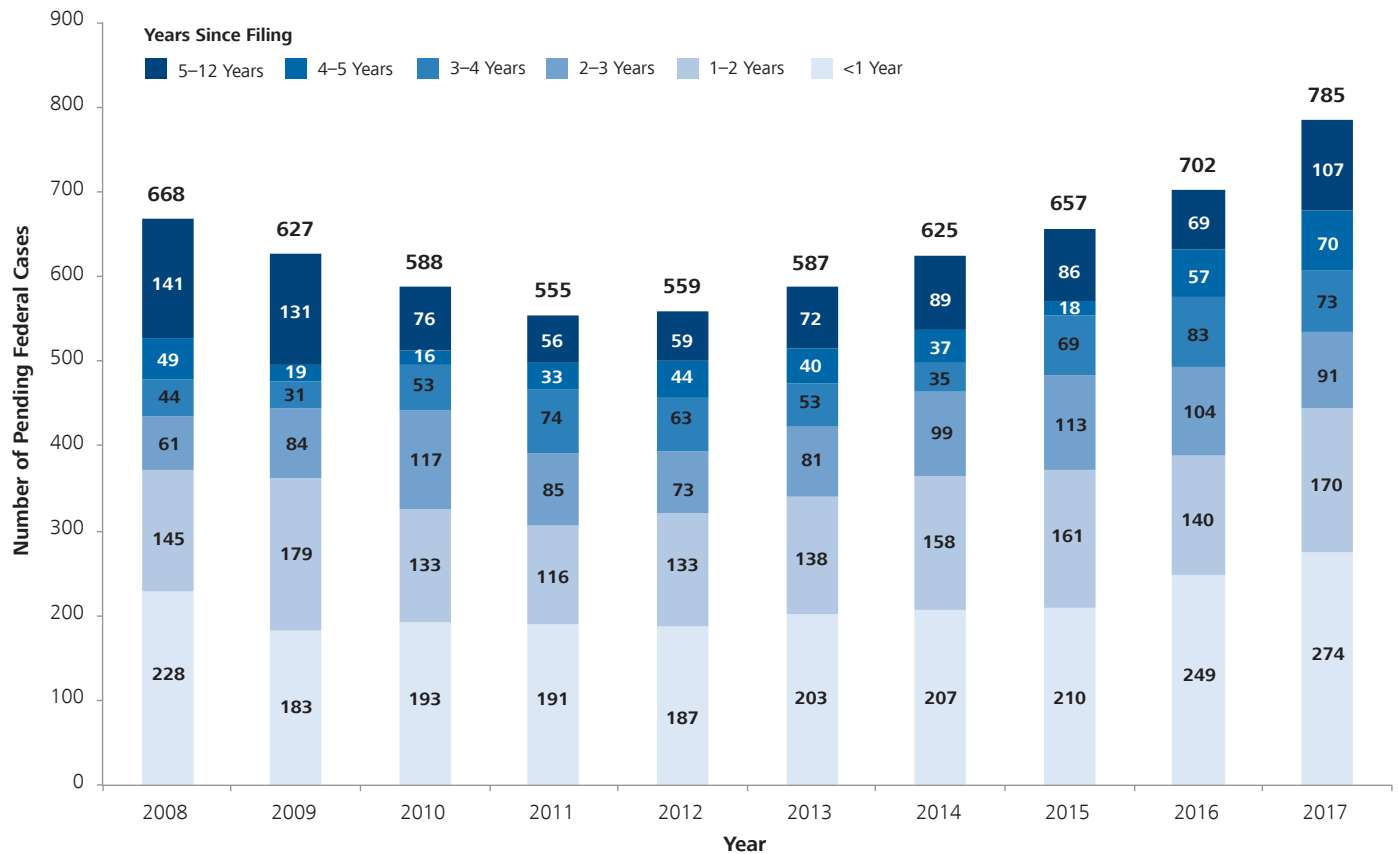
The number of securities class actions pending in the federal system has steadily increased from a post-PSLRA low of 555 in 2011 (see Figure 19).³² Since then, pending case counts have increased every year (indeed at a faster rate in every year except 2015). In 2017, the number pending cases in the federal system increased to 785, up by 12% from 2016 and 41% from 2011.

Generally, since cases are either pending or resolved, a change in filing rate or a lengthening of the time to case resolution potentially contributes to changes in the number of cases pending. If the number of new filings is constant, the change in the number of pending cases can be indicative of whether the time to case resolution is generally shortening or lengthening.

The increase in pending cases in 2017 partially stemmed from a record number of recent filings, which was only partially offset by the record number of case resolutions. Approximately 20% of the growth in pending cases in 2017 is tied to new filings. In other words, despite the record number of cases filed in the past year also being resolved at a record rate, new filings are adversely affecting the pending case load.

The recent influx of merger-objection filings corresponded with considerable differences in the growth of pending cases between circuits. Growth in pending cases between 2015 (just before the *Trulia* decision) and 2017 was about 5.5 times higher in the four circuits with the most new merger-objection filings relative to historical filing rates, versus the four circuits with the fewest new merger-objection filings relative to historical filing rates. Overall, in 2016 and 2017, merger-objection filings in the Third, Fourth, Eighth, and Tenth Circuits exceeded the total number of all types of filings in those circuits in 2014 and 2015 by about 6.5%. This corresponded with a 41.9% increase in pending cases in those circuits. That contrasts with the Second, Fifth, Seventh, and Eleventh Circuits, where new merger objections in 2016 and 2017 were about 82.7% less than aggregate filings in 2014 and 2015. This corresponded with only about a 7.5% increase in pending cases in those circuits.³³ It remains to be seen whether the recent influx of merger-objection cases significantly slows processing of standard securities class actions.

Figure 19. **Number of Pending Federal Cases**
 Excluding IPO Laddering Cases
 January 2008–December 2017



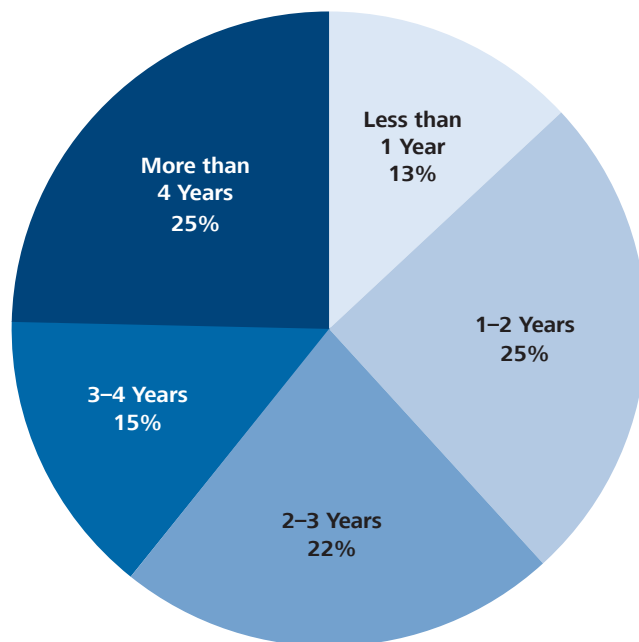
Note: Years since filing are year-end calculations. The figure excludes, in each year, cases that had been filed more than 12 years earlier, which ensures that all pending cases were filed post-PSLRA and that years are comparable.

Time to Resolution

The term “time to resolution” denotes the time between the filing of the first complaint and resolution (whether through settlement or dismissal). Figure 20 illustrates the time to resolution for all securities class actions filed between 2001 and 2013, and shows that about 38% of cases are resolved within two years of initial filing and about 60% are resolved within three years.³⁴

The median time to resolution for cases filed in 2015 (the last year with sufficient resolution data) was 2.3 years, similar to the range observed over the preceding five years. Over the previous decade, the median time to resolution declined by more than 5%, primarily due to an increase in the dismissal rate (dismissals are generally resolved faster than settlements) and due to shorter time to settlement, as opposed to a shorter time to dismissal.

Figure 20. **Time from First Complaint Filing to Resolution**
Excludes Merger Objection and IPO Laddering Cases
Cases Filed January 2001–December 2013



Trends in Settlements

We present several settlement metrics to highlight attributes of cases that settled in 2017 and to compare them with cases settled in past years. We discuss two ways of measuring average settlement amounts and calculate the median settlement amount. Each calculation excludes IPO laddering cases, merger-objection cases, and cases that settle with no cash payment to the class, as settlements of such cases may obscure trends in what have historically been more typical cases.

Each of our three metrics indicates a decline in settlement values on an inflation-adjusted basis to lows not observed since the early 2000s. The recent drop is in sharp contrast with a steady increase in overall settlement values over the preceding two years. However, excluding settlements of over \$1 billion, 2017 saw the second consecutive annual drop in the average settlement value. For the first time since 1998, no case settled for more than \$250 million (without adjusting for inflation).

Record-low settlement metrics in 2017 do not necessarily indicate that cases were, on average, especially weak, as the aggregate size of settled cases in 2017 (indicated by aggregate NERA-defined Investor Losses) was the lowest since 2003. The trends in 2017 settlements do not necessarily portend low aggregate settlements in the future.³⁵ In fact, aggregate Investor Losses of pending cases, a factor that has historically been significantly correlated with settlement amounts, increased for the second consecutive year and currently exceed \$900 billion.³⁶ Average Investor Losses of pending standard cases have also increased for the second consecutive year to \$2.1 billion, but have fallen from a 10-year high of \$3.8 billion in 2011.

To illustrate how many cases settled over various ranges in 2017 compared with prior years, we provide a distribution of settlements over the past five years. We also tabulated the 10 largest settlements of 2017.

Average and Median Settlement Amounts

In 2017, the average settlement amount fell to less than \$25 million, a drop of about two-thirds compared with 2016, adjusted for inflation (see Figure 21). This contrasts with increases in year-over-year average settlements between 2014 and 2016. While infrequent large settlements are generally responsible for the wide variability in average settlement amounts over the past decade, in 2017 there was a dearth of even moderate settlements.

Figure 21. **Average Settlement Value (\$Million)**

Excluding Merger-Objection Cases, IPO Laddering Cases, and Settlements for \$0 Payment to the Class
January 2008–December 2017

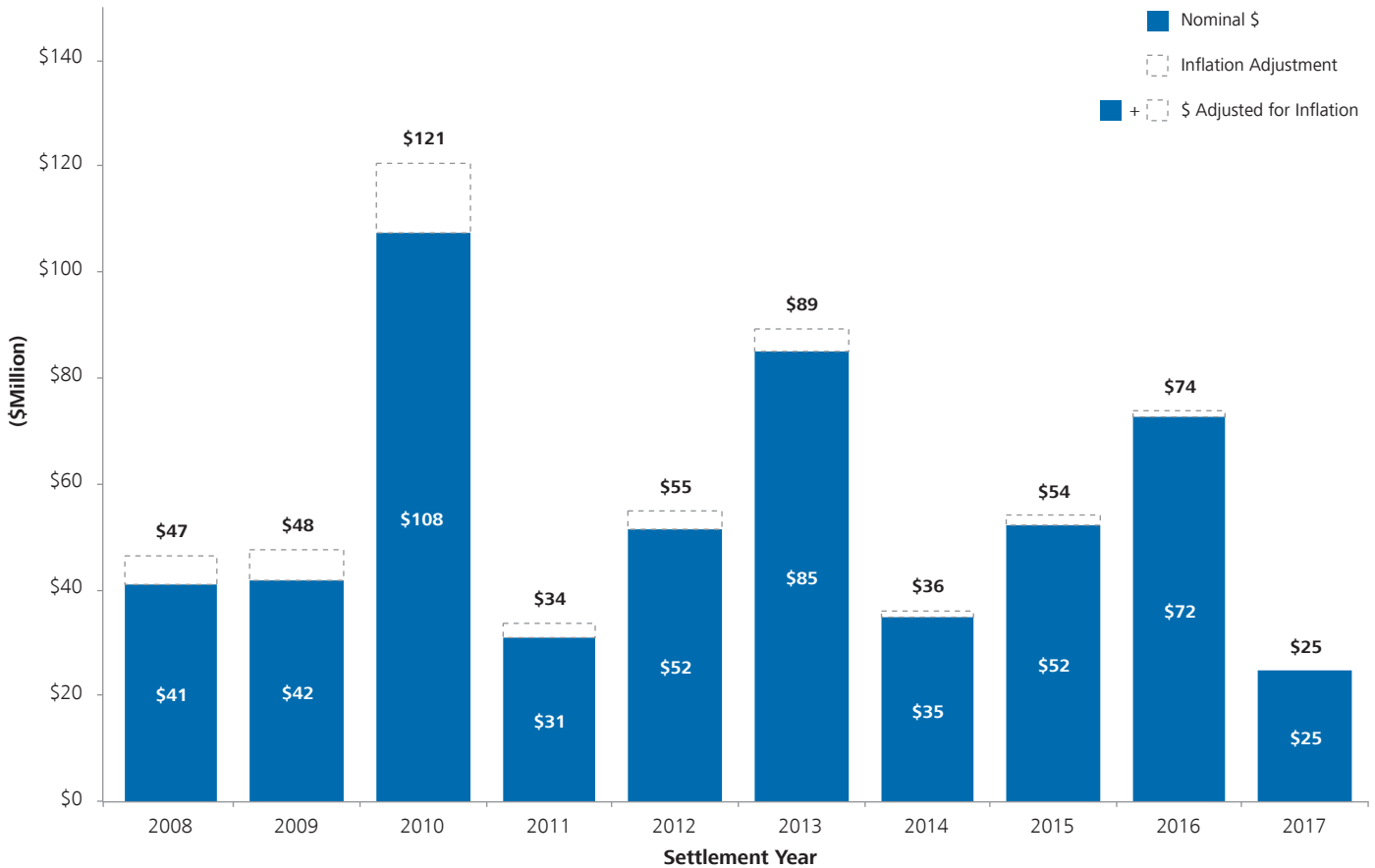
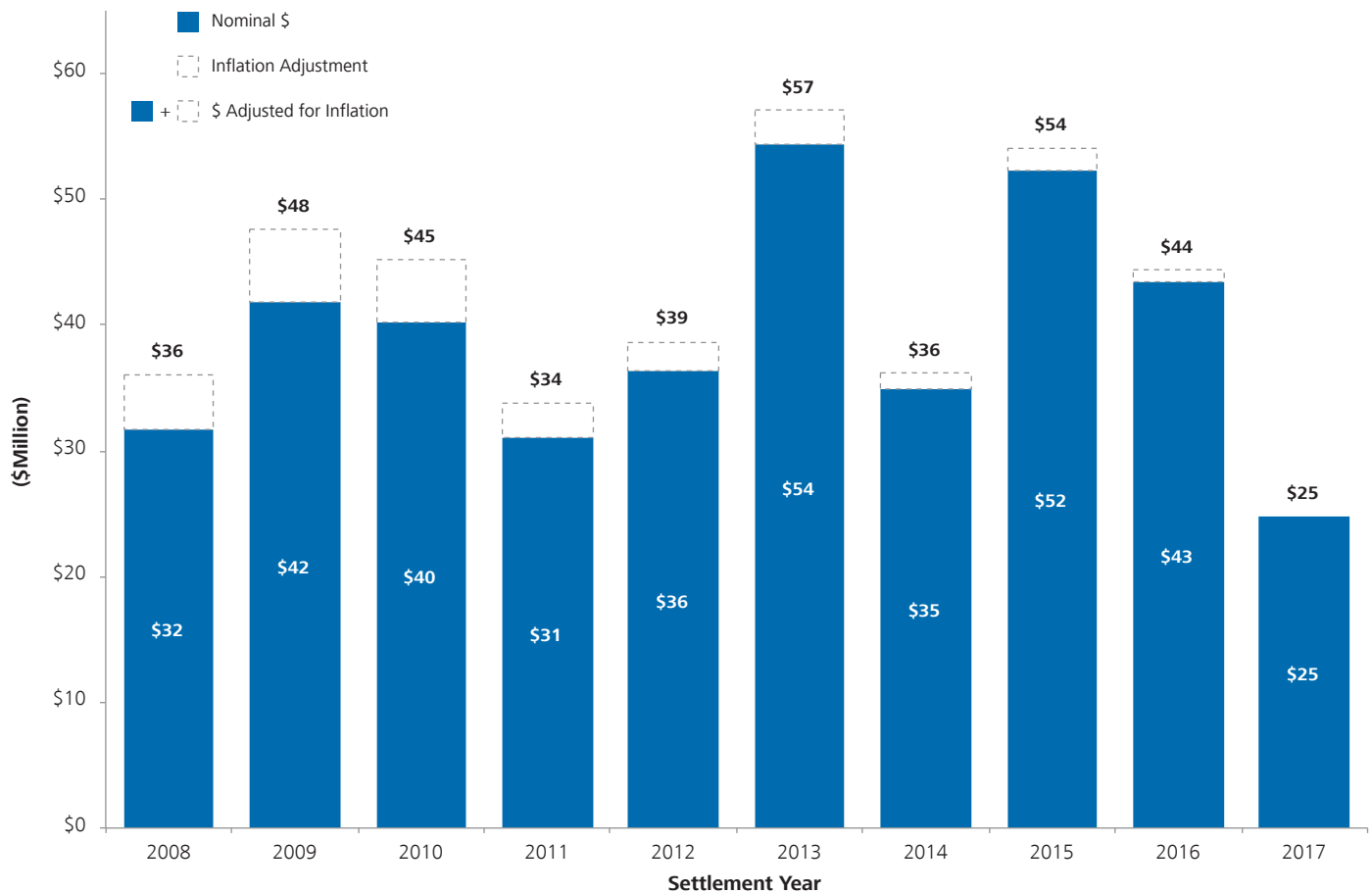


Figure 22 illustrates that, even excluding settlements over \$1 billion, the \$25 million average settlement in 2017 is more than 40% less than the comparable figure from 2016, and more than 25% less than the next lowest average settlement over the last decade (in 2011). Adjusted for inflation, the average settlement in 2017 was the lowest since 2001.

Figure 22. **Average Settlement Value (\$Million)**

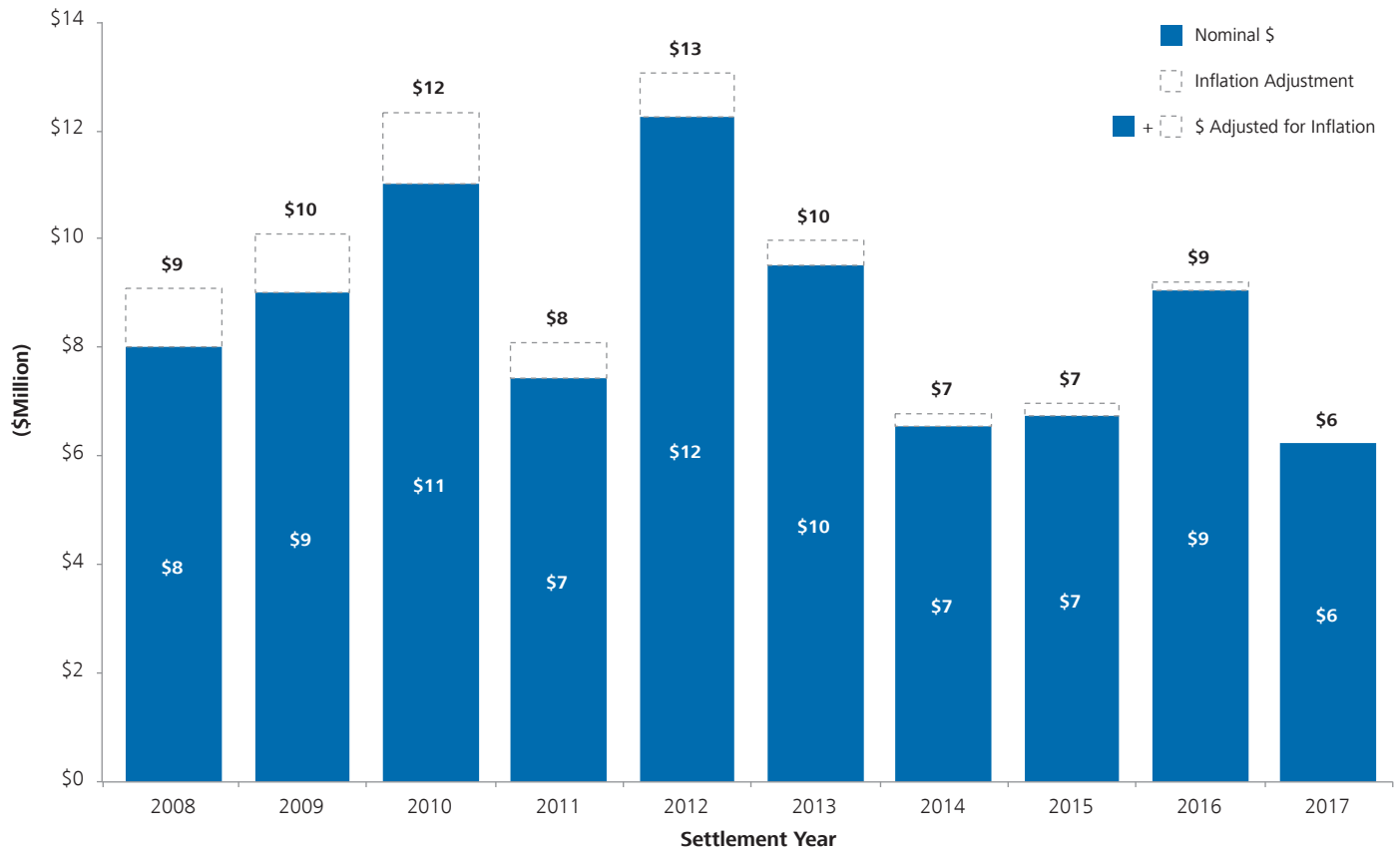
Excluding Settlements over \$1 Billion, Merger-Objection Cases, IPO Laddering Cases, and Settlements for \$0 Payment to the Class January 2008–December 2017



Despite the dramatic drop in 2017 average settlement metrics, over the longer term, settlement amounts have not declined as considerably across the board. The 2017 median settlement amount, or the amount that is larger than half of the settlement values over the year, is only moderately below the median settlement values in 2014 and 2015, even after adjusting for inflation (see Figure 23). Despite this, the median settlement in 2017 is the lowest since 2001.

Figure 23. **Median Settlement Value (\$Million)**

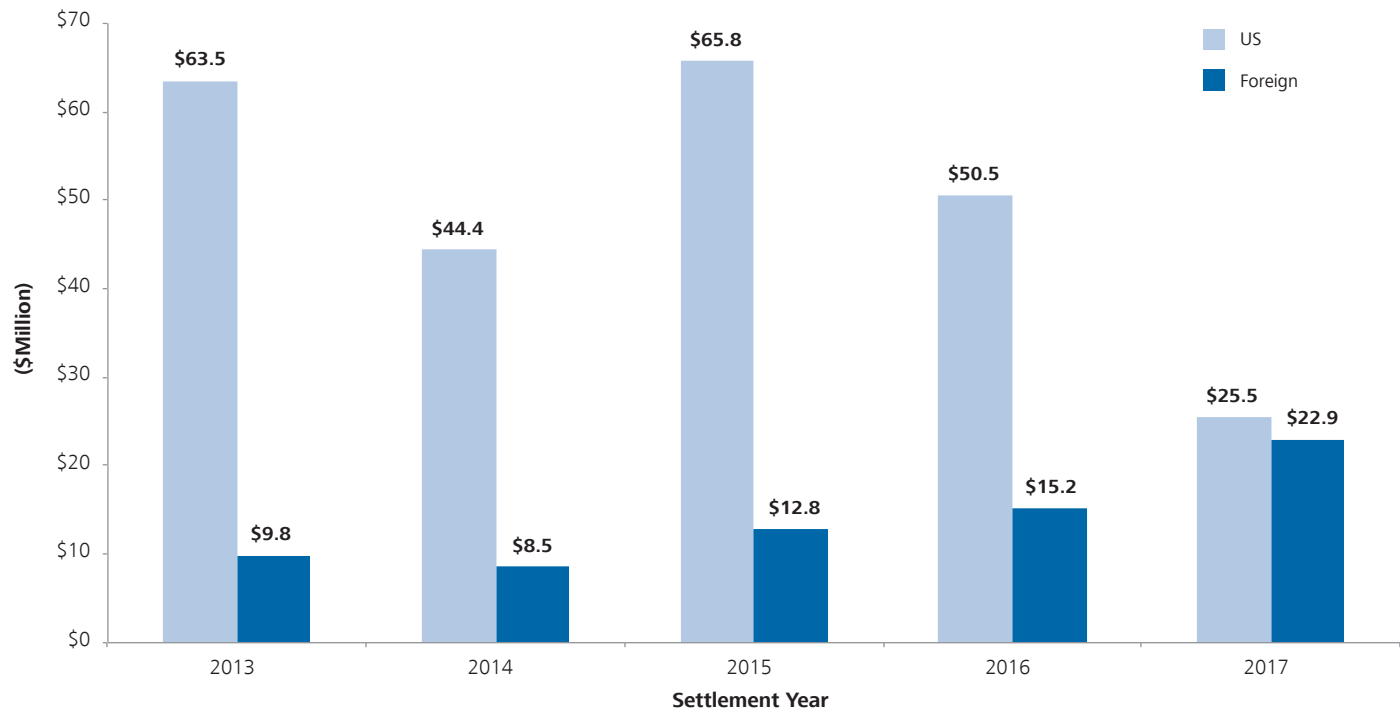
Excluding Settlements over \$1 Billion, Merger-Objection Cases, IPO Laddering Cases, and Settlements for \$0 Payment to the Class
January 2008–December 2017



Securities class actions targeting foreign issuers settled for an average of \$22.9 million in 2017, close to parity with settlements of cases against domestic issuers (see Figure 24). Contrasting with the slowdown in high and moderate settlements against domestic issuers, there were two relatively large settlements against foreign issuers in 2017. BP p.l.c. (2010) settled for \$175 million, while Elan Corporation plc (2012) settled for \$135 million, with both settlements among the top 10 settlements in 2017. Excluding these two cases, the 2017 average was \$8.2 million.

Figure 24. **Average Settlement Value—US vs. Foreign Companies (\$Million)**

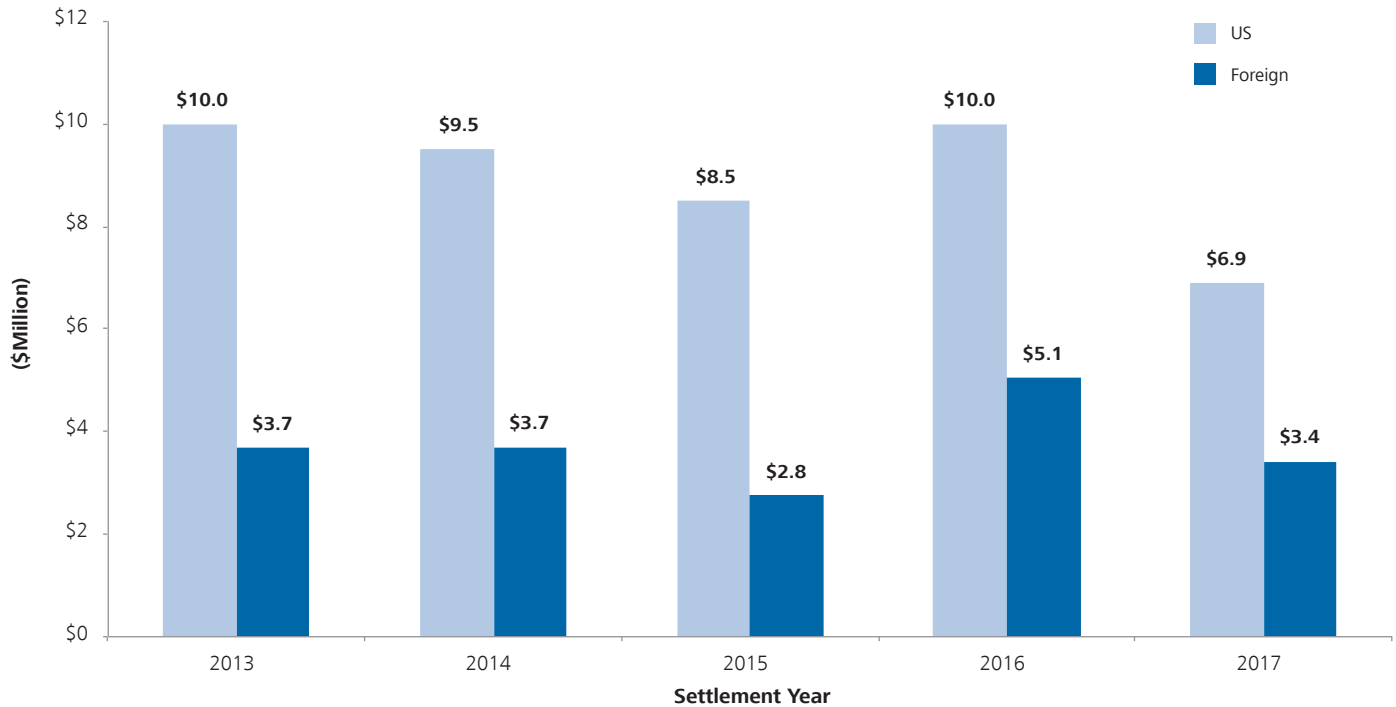
Excluding Settlements over \$1 Billion, Merger-Objection Cases, and Settlements for \$0 Payment to the Class
January 2013–December 2017



Note: Foreign company status based on country of principal executive offices.

In 2017, the median settlement of securities class actions targeting foreign issuers was \$3.4 million, in line with prior years. Securities class actions against foreign issuers are generally smaller, as measured by NERA-defined Investor Losses. Cases targeting firms located in China also tend to settle for less than comparable cases against domestic firms.

Figure 25. **Median Settlement Value—US vs. Foreign Companies (\$Million)**
Excluding Settlements over \$1 Billion, Merger-Objection Cases, and Settlements for \$0 Payment to the Class
January 2013–December 2017



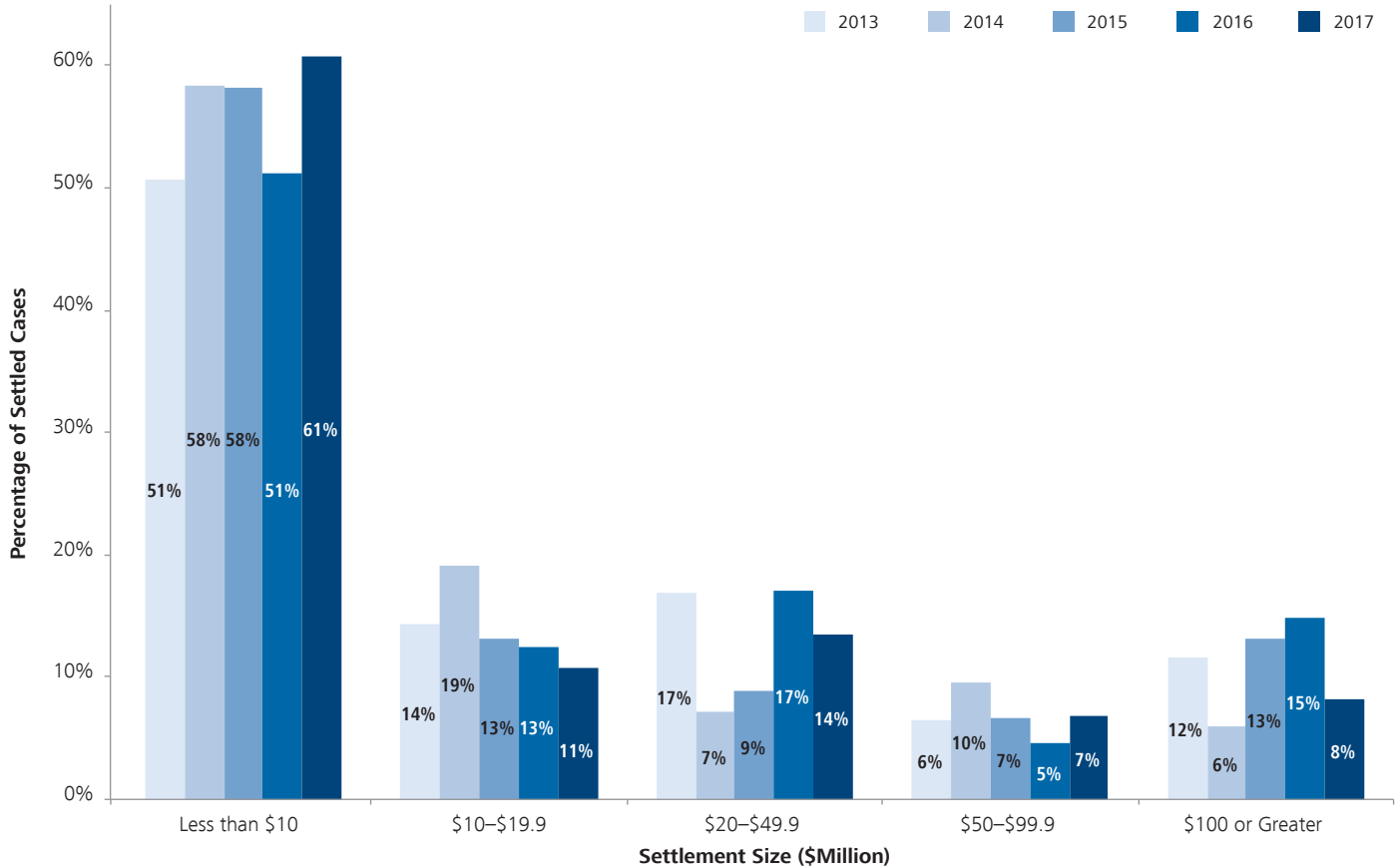
Note: Foreign company status based on country of principal executive offices.

Distribution of Settlement Amounts

In 2017, a dearth of moderate and large settlements resulted in a higher proportion of cases that settled for amounts less than \$10 million (see Figure 26). This reversed a persistent trend between 2014 and 2016 toward a higher proportion of settlements that exceeded \$20 million. As such, in 2017 the distribution of settlements dramatically skewed toward the lower end of the range.

Figure 26. **Distribution of Settlement Values**

Excluding Merger-Objection Cases and Settlements for \$0 Payment to the Class
January 2013–December 2017



The 10 Largest Settlements of Securities Class Actions of 2017

The 10 largest securities class action settlements of 2017 are shown in Table 1. Three of the 10 largest settlements involved defendants in the Health Technology and Services Sector. This contrasts with the preceding two years, in which the majority of large settlements involved financial sector defendants. Overall, these 10 cases accounted for more about \$1.2 billion out of about \$1.8 billion in aggregate settlements (67%) over the period. The largest settlement, which involved Salix Pharmaceuticals, Ltd., was for \$210 million, making up about 11% of total dollars spent on settlements during the year.

Table 1. **Top 10 2017 Securities Class Action Settlements**

Ranking	Case Name	Total Settlement Value (\$Million)	Plaintiffs' Attorneys' Fees and Expenses Value (\$Million)
1	Salix Pharmaceuticals, Ltd.	\$210.0	\$48.7
2	BP p.l.c. (2010)	\$175.0	\$24.3
3	NovaStar Mortgage Funding Trusts	\$165.0 ¹	\$49.7
4	Clovis Oncology, Inc. (2015)	\$142.0	\$32.9
5	Elan Corporation, plc (2012)	\$135.0	\$29.5
6	Halliburton Company	\$100.0	\$40.8
7	J. C. Penney Company, Inc.	\$97.5	\$33.5
8	Dole Food Company, Inc. (2015)	\$74.0	\$19.1
9	Rayonier Inc.	\$73.0	\$25.4
10	Ocwen Financial Corporation	\$56.0	\$17.3
	Total	\$1,227.5	\$321.2

Note:

¹ The settlement was preliminarily approved on 9 May 2017. The final hearing was originally scheduled for 13 September 2017 and later rescheduled for 20 September 2017, but did not occur due to an appeal. At the time of this report's publication, the appeal was pending before the Second Circuit.

These settlements pale in comparison to the largest settlements since passage of the PSLRA. Enron Corp. settled for more than \$7.2 billion in aggregate, while Bank of America Corp. settled for more than \$2.4 billion in 2013, making it the largest Finance Sector settlement ever (see Table 2).

Table 2. **Top 10 Securities Class Action Settlements**
As of 31 December 2017

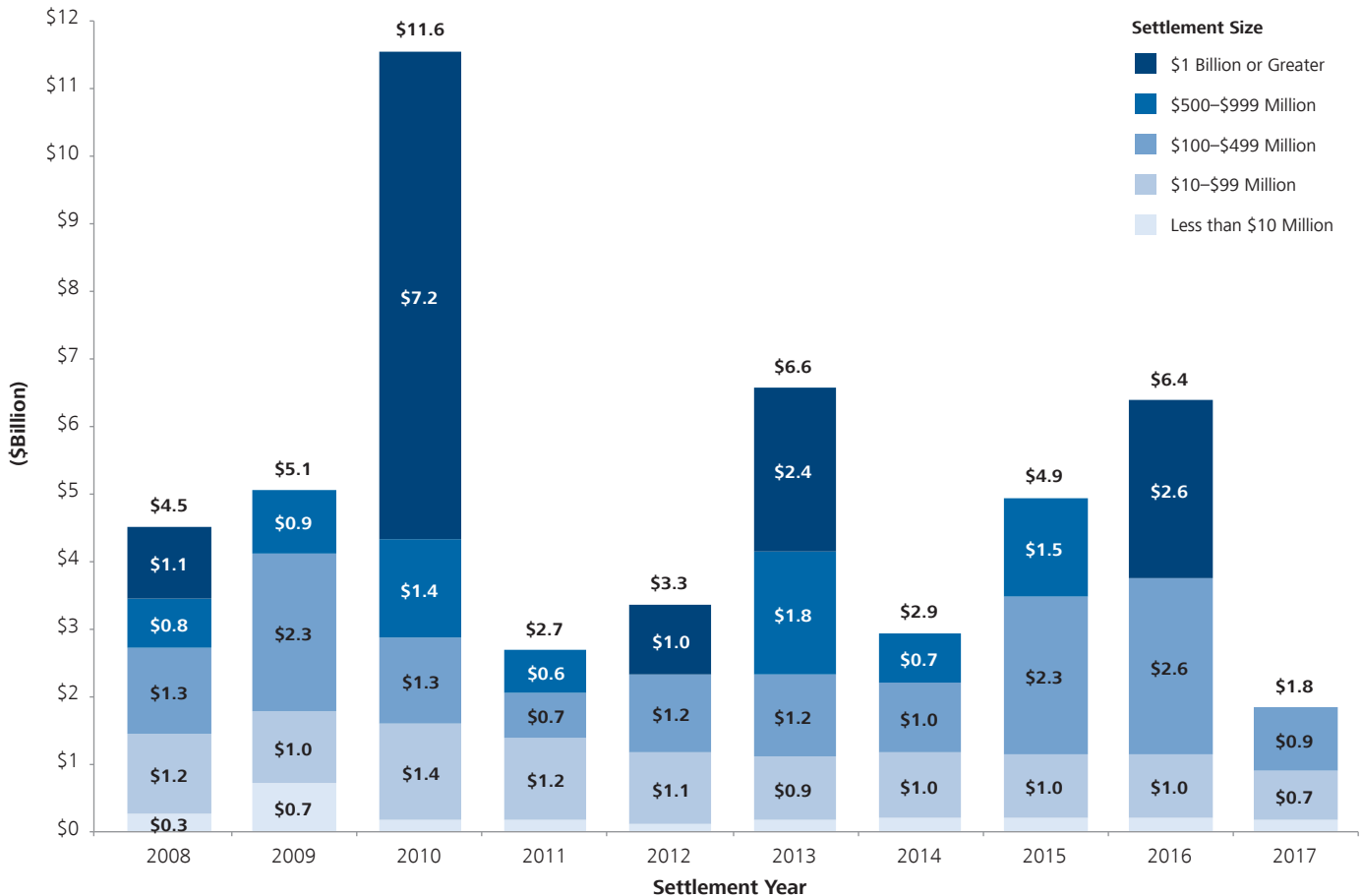
Ranking	Defendant	Settlement Year(s)	Total Settlement Value (\$Million)	Codefendant Settlements		Plaintiffs' Attorneys' Fees and Expenses Value (\$Million)
				Financial Institutions Value (\$Million)	Accounting Firms Value (\$Million)	
1	ENRON Corp.	2003–2010	\$7,242	\$6,903	\$73	\$798
2	WorldCom, Inc.	2004–2005	\$6,196	\$6,004	\$103	\$530
3	Cendant Corp.	2000	\$3,692	\$342	\$467	\$324
4	Tyco International, Ltd.	2007	\$3,200	No codefendant	\$225	\$493
5	AOL Time Warner Inc.	2006	\$2,650	No codefendant	\$100	\$151
6	Bank of America Corp.	2013	\$2,425	No codefendant	No codefendant	\$177
7	Household International, Inc.	2006–2016	\$1,577	\$0	Dismissed	\$427
8	Nortel Networks (I)	2006	\$1,143	No codefendant	\$0	\$94
9	Royal Ahold, NV	2006	\$1,100	\$0	\$0	\$170
10	Nortel Networks (II)	2006	\$1,074	No codefendant	\$0	\$89
	Total		\$30,298	\$13,249	\$967	\$3,252

Aggregate Settlements

We use the term “aggregate settlements” to denote the total amount of money to be paid to settle litigation by (non-dismissed) defendants based on court-approved settlements during a year.

Aggregate settlements were about \$1.8 billion in 2017, a drop of more than 70% to a level not seen since 2001 (see Figure 27). This dramatic decline reflects both a drop in the number of standard case settlements in 2017 and the near-record low overall average settlement value.

Figure 27. **Aggregate Settlement Value by Settlement Size (\$Billion)**
January 2008–December 2017



NERA-Defined Investor Losses vs. Settlements

As noted above, our proxy for case size, NERA-defined Investor Losses, is a measure of the aggregate amount that investors lost from buying the defendant's stock rather than investing in the broader market during the alleged class period.

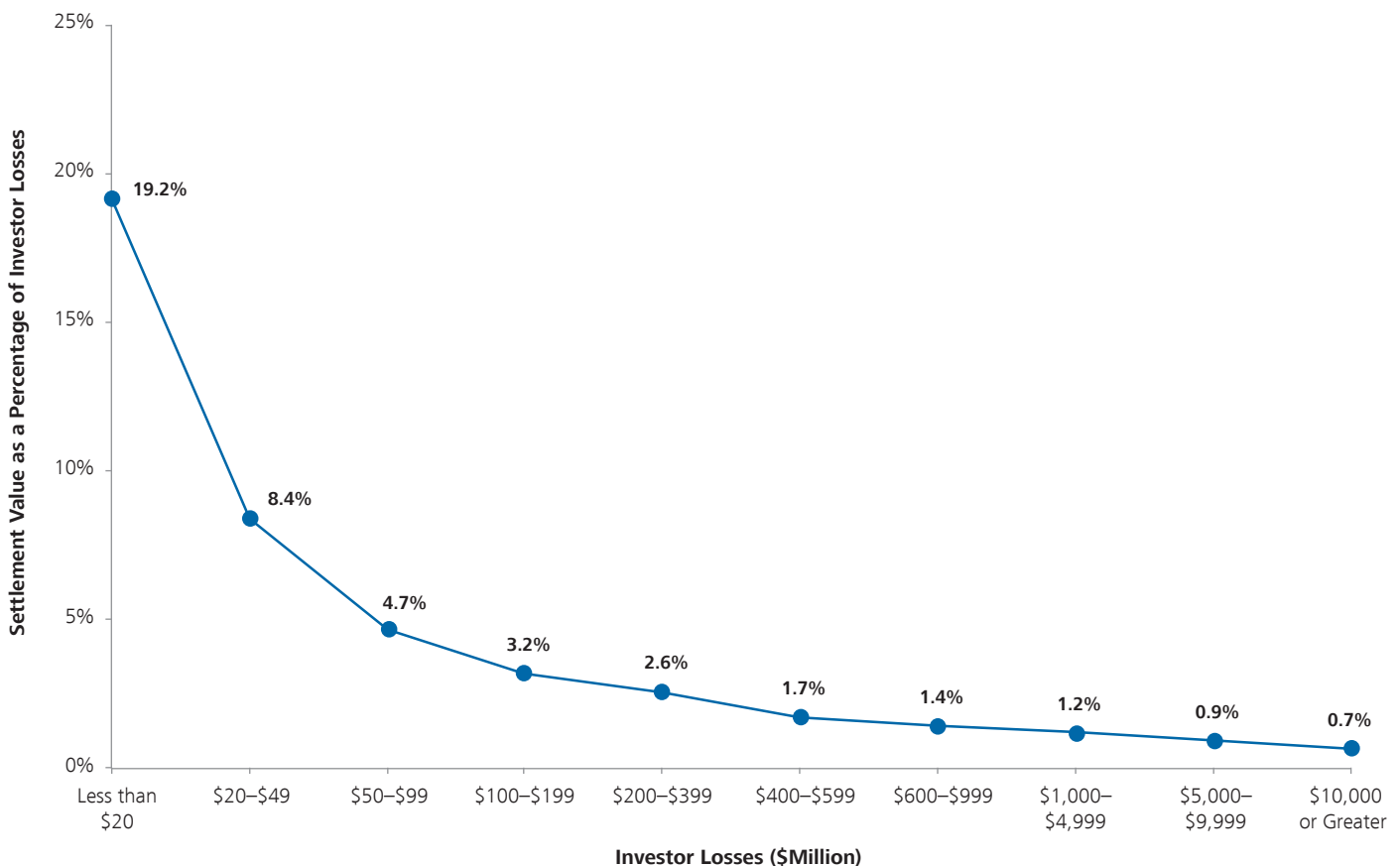
In general, settlement size grows as NERA-defined Investor Losses grow, but the relationship is not linear. Based on our analysis of data from 1996 to 2017, settlement size grows less than proportionately with Investor Losses. In particular, small cases typically settle for a higher fraction of Investor Losses (i.e., more cents on the dollar) than larger cases. For example, the median ratio of settlement to Investor Loss was 19.2% for cases with Investor Losses of less than \$20 million, while it was 0.7% for cases with Investor Losses over \$10 billion (see Figure 28).

Our findings regarding the ratio of settlement amount to NERA-defined Investor Losses should not be interpreted as the share of damages recovered in settlement but rather as the recovery compared to a rough measure of the "size" of the case. Notably, the percentages given here apply *only* to NERA-defined Investor Losses. Use of a different definition of investor losses would result in a different ratio. Also, the use of the ratio alone to forecast the likely settlement amount would be inferior to a proper all-encompassing analysis of the various characteristics shown to impact settlement amounts, as discussed in the next section.

Figure 28. **Median of Settlement Value as a Percentage of NERA-Defined Investor Losses by Level of Investor Losses**

Excluding Settlements for \$0 Payment to the Class

January 1996–December 2017

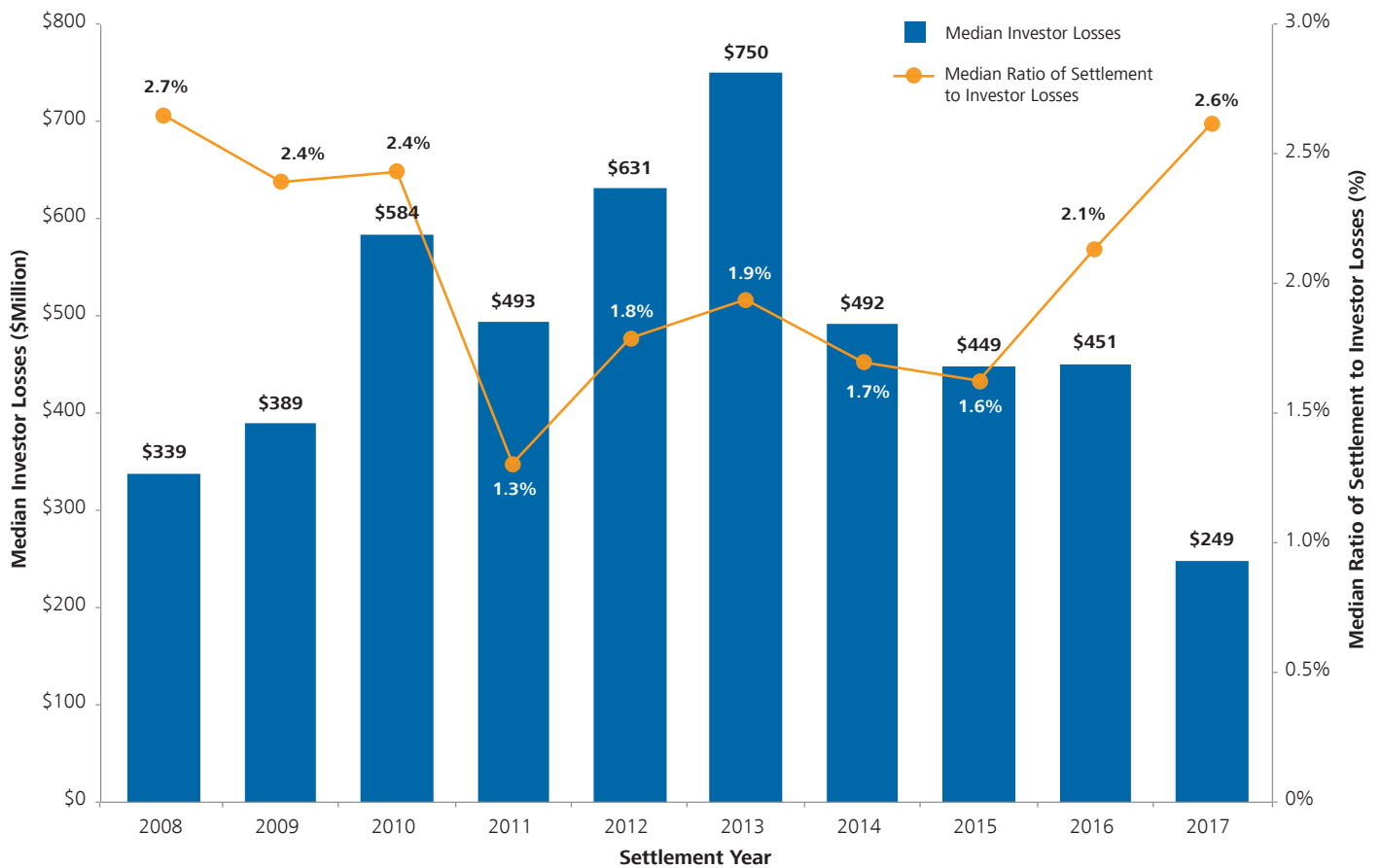


Median NERA-Defined Investor Losses over Time

Prior to 2014, median NERA-defined Investor Losses for settled cases had been on an upward trajectory since the passage of the PSLRA. As described above, the median ratio of settlement size to Investor Losses generally decreases as Investor Losses increase. Over time, the increase in median Investor Losses coincided with a decreasing trend in the median ratio of settlement to Investor Losses. Of course, there are year-to-year fluctuations.

As shown in Figure 29, the median ratio of settlements to NERA-defined Investor Losses was 2.6% in 2017. This was the second consecutive yearly increase and at least a short-term reversal of a long-term downtrend of the ratio between passage of the PSLRA and 2015. The increase in the median settlement ratio is to be expected given relatively few settlements of large and moderately-sized cases.

Figure 29. **Median NERA-Defined Investor Losses and Median Ratio of Settlement to Investor Losses**
Shareholder Class Actions with Alleged Violations of Rule 10b-5, Section 11, or Section 12
January 2008–December 2017



Explaining Settlement Amounts

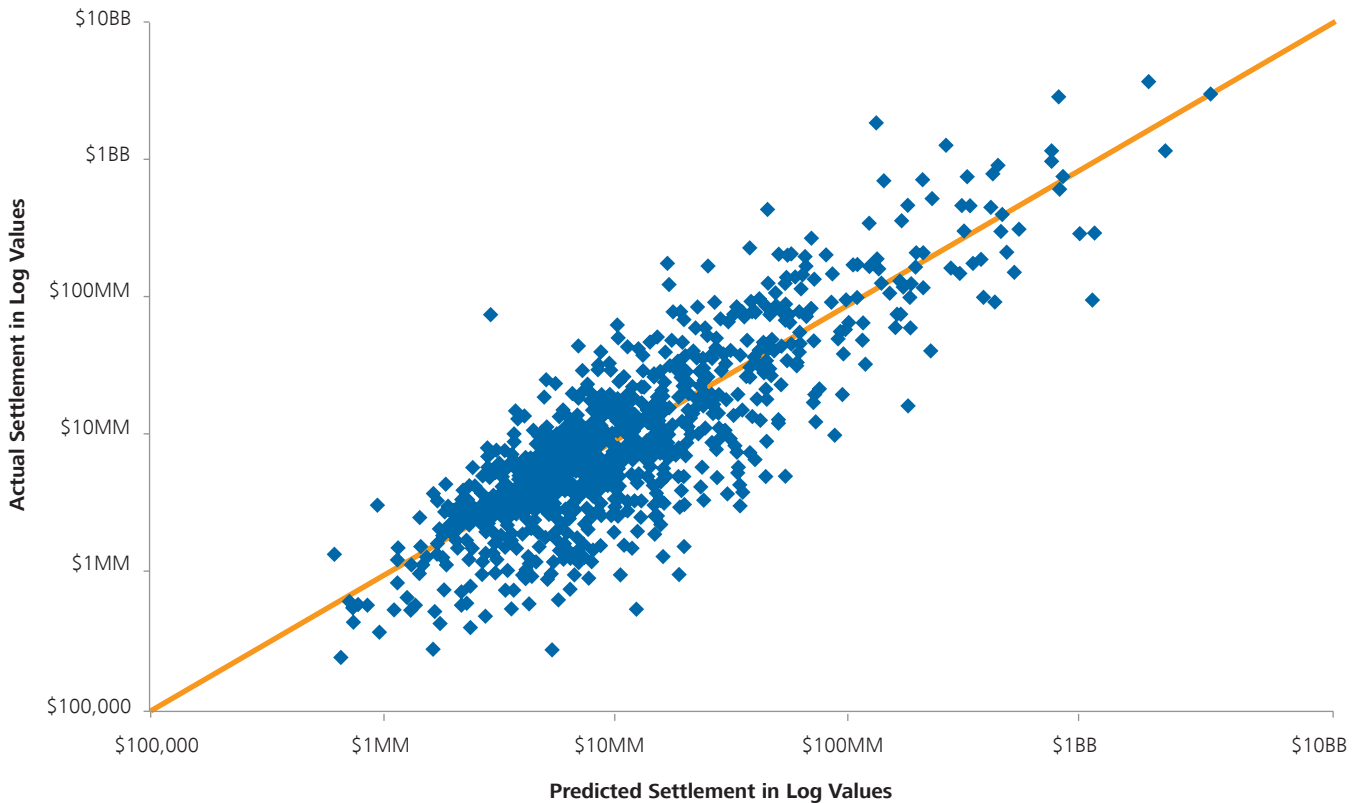
The historical relationship between case attributes and other case- and industry-specific factors can be used to measure the factors that are correlated with settlement amounts. NERA has examined settlements in more than 1,000 securities class actions and identified key drivers of settlement amounts, many of which have been summarized in this report.

Generally, we find that the following factors have historically been significantly correlated with settlement amounts:

- NERA-defined Investor Losses (a proxy for the size of the case);
- The market capitalization of the issuer;
- Types of securities alleged to have been affected by the fraud;
- Variables that serve as a proxy for the “merit” of plaintiffs’ allegations (such as whether the company has already been sanctioned by a governmental or regulatory agency or paid a fine in connection with the allegations);
- Admitted accounting irregularities or restated financial statements;
- The existence of a parallel derivative litigation; and
- An institution or public pension fund as lead plaintiff.

Together, these characteristics and others explain most of the variation in settlement amounts, as illustrated in Figure 30.³⁷

Figure 30. **Predicted vs. Actual Settlements**

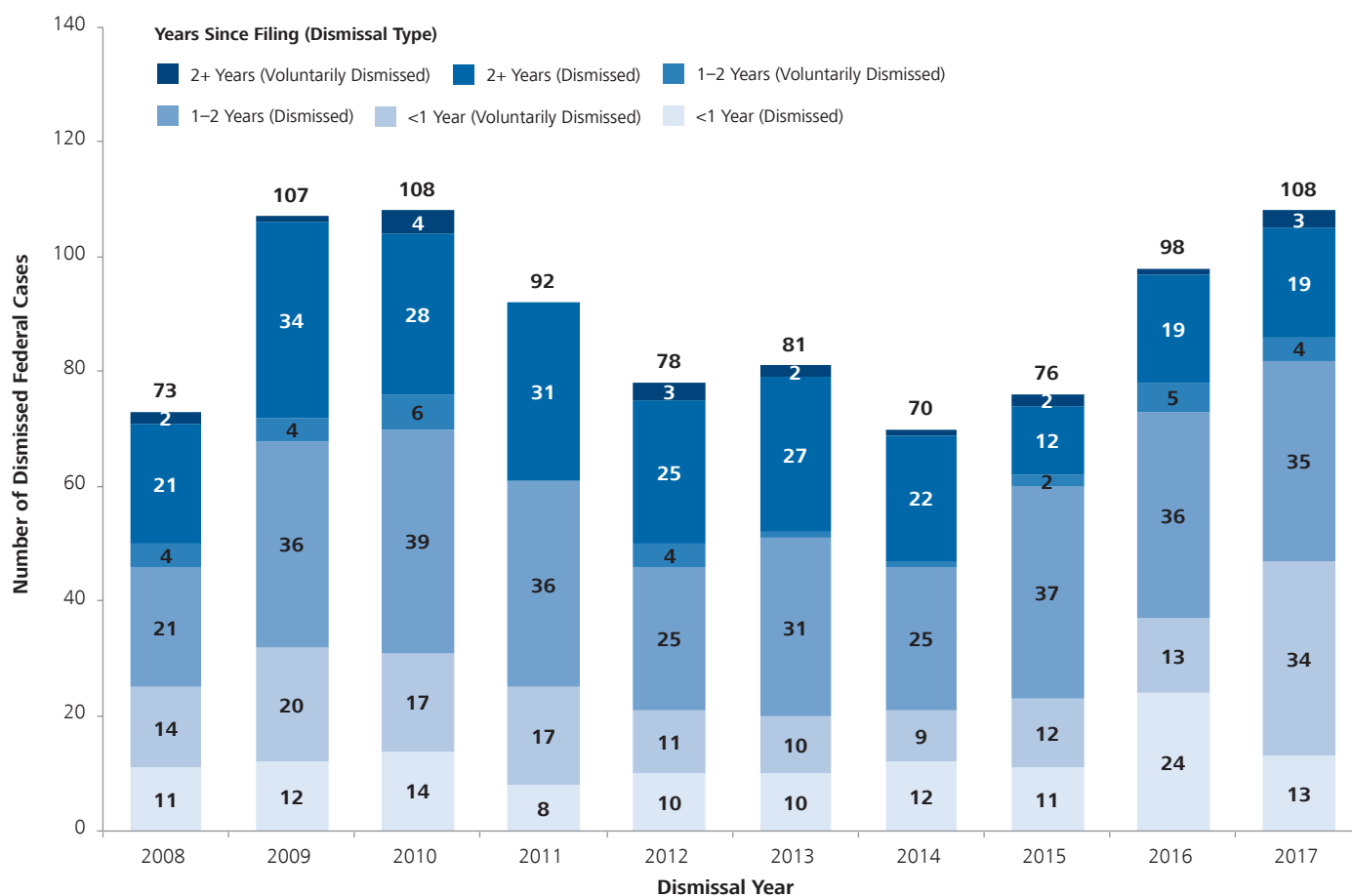


Trends in Dismissals

In 2017, the number of dismissals (excluding merger objections) matched the high of 108 over the last decade (see Figure 31). This was largely due to a substantial increase in voluntary dismissals, which more than doubled.³⁸ In particular, the number of voluntary dismissals without prejudice increased from two in 2016 to 32 in 2017. Out of all voluntary dismissals in 2017, 83% occurred within one year of filing, the highest rate in 10 years and well above the five-year average of 73%.

Generally, most voluntary dismissals occur within a year of filing, and the increase in 2017 can partially be attributed to more cases being filed. More filings also occurred in the first quarter of 2017, providing a longer dismissal window. However, filings of standard securities class actions grew at a slower rate in 2017 than in 2011, and growth was only somewhat faster than in 2013. Despite that, the number of voluntary dismissals within one year of filing was unchanged in 2011 and fell in each year between 2012 and 2014.

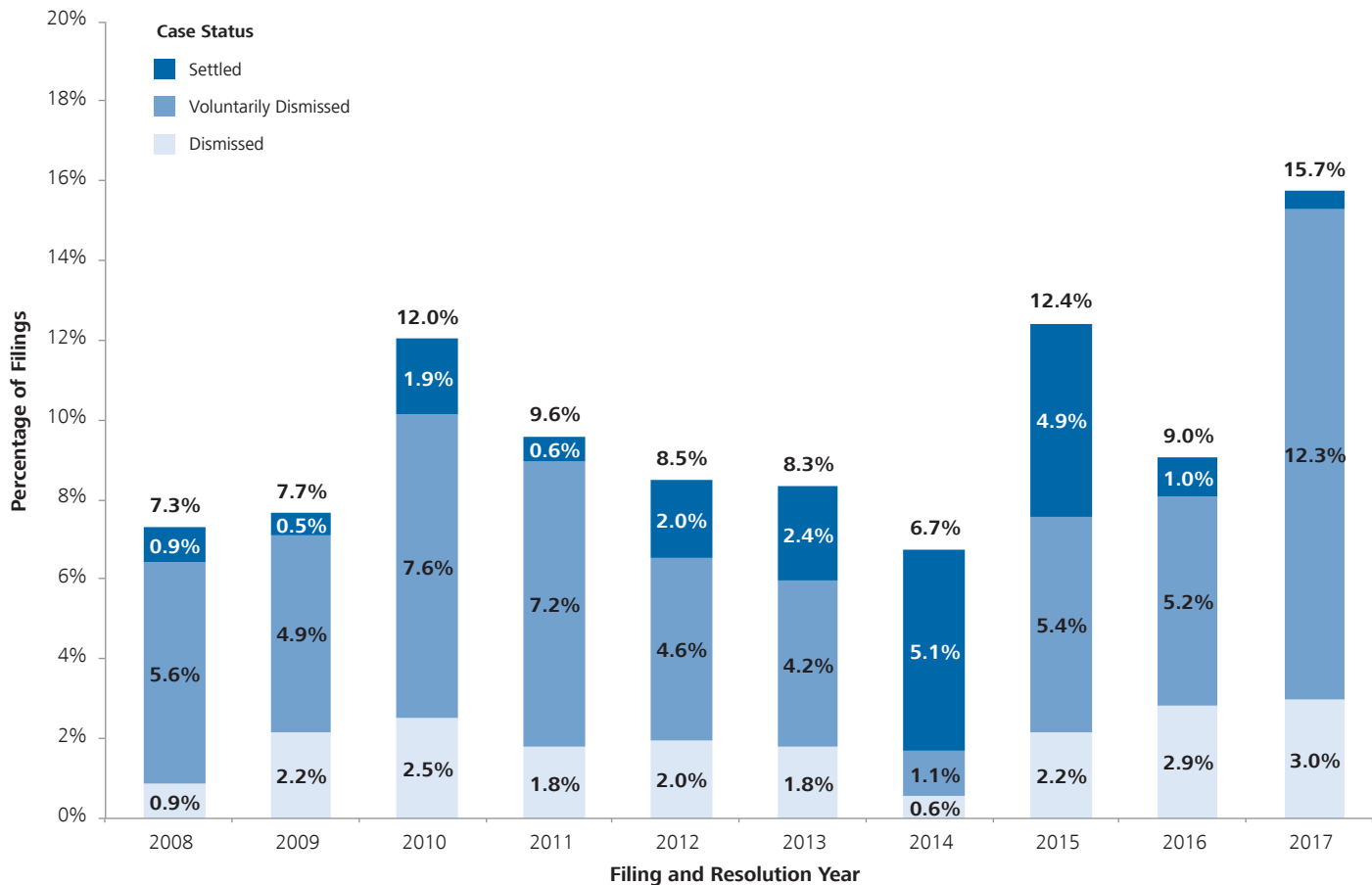
Figure 31. **Number of Dismissed Cases by Case Age**
Excluding Merger Objections
January 2008–December 2017



In 2017, 15.7% of standard cases were filed and resolved within the same calendar year, which was the highest rate in at least a decade (see Figure 32). By the end of the year, 12% of cases were voluntarily dismissed, of which the vast majority were voluntary dismissals without prejudice. This may indicate that certain securities cases filed in 2017 were particularly weak, perhaps a result of plaintiffs' managing a more diverse portfolio of casework. Alternatively, the dramatic increase in such dismissals may be driven by plaintiff forum selection.³⁹

The rate of voluntary dismissals was not particularly concentrated in terms of jurisdiction or the specific allegations we track.

Figure 32. **Year-End Status of Class Actions Filed and Resolved Within Each Calendar Year**
Excluding Merger Objections
January 2008–December 2017



Trends in Attorneys' Fees

Plaintiffs' Attorneys' Fees and Expenses

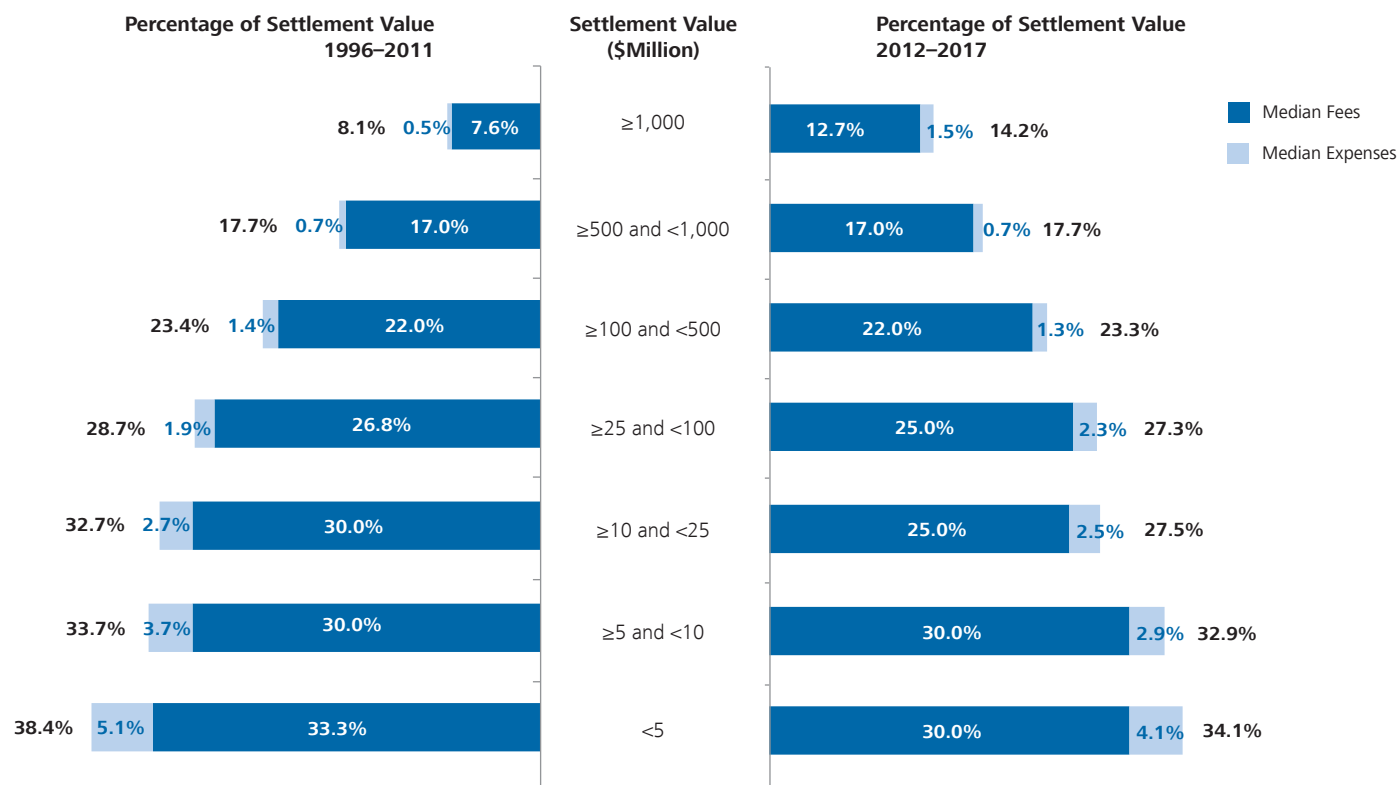
Usually, plaintiffs' attorneys' remuneration is determined as a fraction of any settlement amount in the form of fees, plus expenses. Figure 33 depicts plaintiffs' attorneys' fees and expenses as a proportion of settlement values over ranges of settlement amounts. The data in the figure exclude settlements of merger-objection cases and cases with no cash payment to the class.

A strong pattern is evident in Figure 33: typically, fees grow with settlement size, but less than proportionally (i.e., the fee percentage shrinks as the settlement size grows).

To illustrate that the fee percentage typically shrinks as settlement size grows, we grouped settlements by settlement value and reported the median fee percentage for each group. While fees are stable at around 30% of settlement values for settlements below \$10 million, this percentage declines as settlement size increases.

We also observe that fee percentages have been decreasing over time, except for fees awarded on very large settlements. For settlements above \$1 billion, fee rates have increased.

Figure 33. **Median of Plaintiffs' Attorneys' Fees and Expenses by Size of Settlement**
Excluding Merger-Objection Cases and Settlements for \$0 Payment to the Class



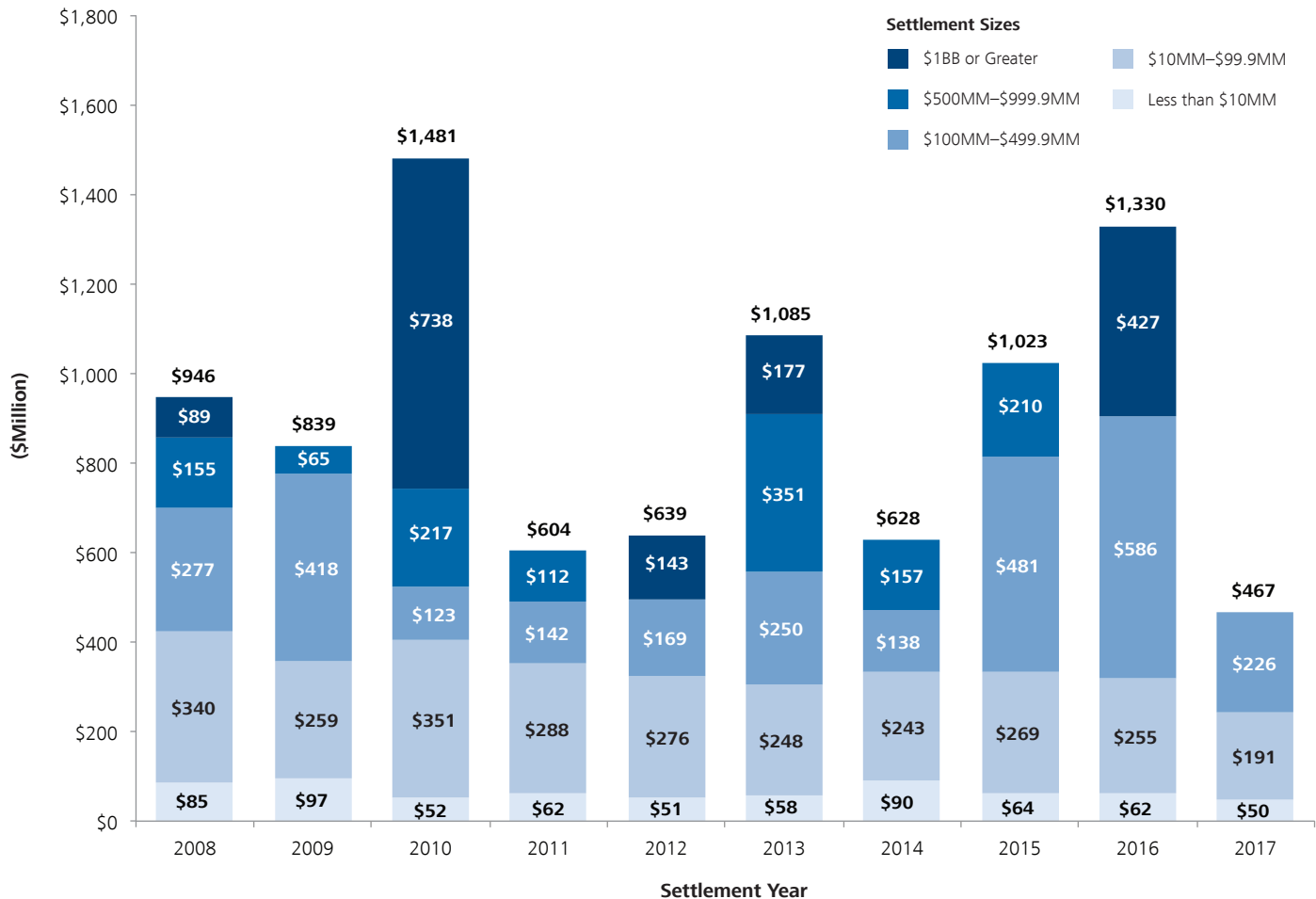
Aggregate Plaintiffs' Attorneys' Fees and Expenses

Aggregate plaintiffs' attorneys' fees and expenses are the sum of all fees and expenses received by plaintiffs' attorneys for all securities class actions that receive judicial approval in a given year.

In 2017, aggregate plaintiffs' attorneys' fees and expenses were \$467 million, a drop of about 65% to a level not seen since 2004 (see Figure 34). This decrease in fee amounts partially reflects the trend toward fewer and smaller settlements. However, the drop in aggregate plaintiffs' attorneys' fees is still less than the 70%+ drop in aggregate settlements, as most cases that settled were smaller, and smaller cases typically have higher fee payout ratios.

Note that this figure differs from the other figures in this section, because the aggregate includes fees and expenses that plaintiffs' attorneys receive for settlements in which no cash payment was made to the class.

Figure 34. **Aggregate Plaintiffs' Attorneys' Fees and Expenses by Settlement Size (\$Million)**
January 2008–December 2017



Notes

- ¹ This edition of NERA's report on recent trends in securities class action litigation expands on previous work by our colleagues Lucy Allen, Dr. Renzo Comolli, the late Dr. Frederick C. Dunbar, Dr. Vinita M. Juneja, Sukaina Klein, Dr. Denise Neumann Martin, Dr. Jordan Milev, Dr. John Montgomery, Robert Patton, Dr. Stephanie Planchich, and others. The authors also thank Dr. Milev and Benjamin Seggerson for helpful comments on this edition. In addition, we thank Edward Flores and other researchers in NERA's Securities and Finance Practice for their valuable assistance. These individuals receive credit for improving this paper; all errors and omissions are ours.
- ² Data for this report have been collected from multiple sources, including Institutional Shareholder Services, Inc., complaints, case dockets, Dow Jones, Bloomberg L.P., FactSet Research Systems Inc., the US Securities and Exchange Commission (SEC) filings, and public press reports.
- ³ Craig Doidge, G. Andrew Karolyi, and René M. Stulz, "The U.S. Listing Gap," National Bureau of Economic Research Working Paper No. 21181, May 2015.
- ⁴ *In re Trulia, Inc. Stockholder Litigation*, C.A. No. 10020-CB (Del. Ch. Jan. 22, 2016).
- ⁵ Despite a 13% year-over-year drop in US M&A deals in 2016, merger-objection suits doubled from 2015 levels (see "Global M&A Review: Full Year 2016 Final Results," Dealogic, January 2017.) The doubling of merger-objection filings again in 2017 far exceeded the 18% increase in deals over the first nine months of 2017 (see "Global M&A Review 3Q 2017," Thomson Reuters, October 2017).
- ⁶ 2010 deal growth and litigation rates obtained from M. D. Cain and S. D. Solomon, "A Great Game: The Dynamics of State Competition and Litigation," *Iowa Law Review*, Vol. 100, No. 165, 2015, Table 1. 2016 M&A activity growth obtained from "Global M&A Review: Full Year 2016 Final Results," Dealogic, January 2017. 2017 deal activity obtained from "Global M&A Review 3Q 2017," Thomson Reuters, October 2017.
- ⁷ M. D. Cain and S. D. Solomon, "A Great Game: The Dynamics of State Competition and Litigation," *Iowa Law Review*, Vol. 100, No. 165, 2015.
- ⁸ M. D. Cain and S. D. Solomon, "Takeover Litigation in 2015," Berkeley Center for Law Business and the Economy, 14 January 2016. Alison Frankel, "Forum Selection Clauses Are Killing Multiforum M&A litigation," *Reuters*, 24 June 2014.
- ⁹ *In re Trulia, Inc. Stockholder Litigation*, C.A. No. 10020-CB (Del. Ch. Jan. 22, 2016), n. 36.
- ¹⁰ M. D. Cain and S. D. Solomon, "Takeover Litigation in 2015," Berkeley Center for Law Business and the Economy, 14 January 2016.
- ¹¹ Warren S. de Wied, "Delaware Forum Selection Bylaws After Trulia," Harvard Law School Forum on Corporate Governance and Financial Regulation, 25 February 2016.
- ¹² *In re: Walgreen Co. Stockholder Litigation*, No. 15-3799 (7th Cir. Aug. 10, 2016).
- ¹³ *Jones v. WSB Holdings, Inc.*, No. CAL-1231262 (Md. Cir. Ct. Nov. 12, 2013).
- ¹⁴ Federal securities class actions that allege violations of Rule 10b-5, Section 11, and/or Section 12 have historically dominated federal securities class action dockets and are often referred to as "standard" cases.
- ¹⁵ Robert Patton, "Recent Trends in US Securities Class Actions against Non-US Companies," NERA Working Paper, 24 October 2012.
- ¹⁶ Kane Wu, "U.S.-Listed China Firms Hurry Homeward," *The Wall Street Journal*, 17 November 2015.
- ¹⁷ Andrew Bolger, "Warning signs appear after bumper IPO year," *Financial Times*, 26 December 2014.
- ¹⁸ "U.S. Tech IPO Market Sucked Less In 2017, But Still Managed To Disappoint," *VentureBeat*, 18 December 2017.
- ¹⁹ "Why Section 11 Class Actions Are Proliferating In Calif.," *Law360*, 27 April 2015.
- ²⁰ Examples of such forum selection include those used by Blue Apron Holdings (see Blue Apron Holdings, Inc. SEC Form 8-K, filed 5 July 2017), MongoDB (see MongoDB, Inc. SEC Form 8-K, filed 25 October 2017), Restoration Robotics (see Restoration Robotics Inc. SEC Form 8-K, filed 17 October 2017), Roku (see Roku, Inc. SEC Form S-1/A, filed 18 September 2017), and Snap (see Snap, Inc. SEC Form S-1, filed 2 February 2017).
- ²¹ *Cyan, Inc. v. Beaver County Employees Retirement Fund*, Supreme Court No. 15-1439.
- ²² In 2016, several pharmaceutical companies were caught up in a long-running US Department of Justice (DOJ) probe into alleged generic drug price collusion (see Andrew Bolger, "U.S. Charges in Generic-Drug Probe to Be Filed by Year-End," *Bloomberg Markets*, 3 November 2016). In September 2016, a leading poultry distributor sued several poultry producers, alleging price fixing of broiler chickens (see Eric Kroh, "Poultry Producers Hit With Chicken Price Antitrust Suit," *Law360*, 3 September 2016).
- ²³ 13% of firms in the Third Circuit are in the Pharmaceutical Preparations industry (SIC code 2834), compared with 8% of publicly traded firms. These are mostly incorporated in New Jersey.
- ²⁴ *In re: Walgreen Co. Stockholder Litigation*, No. 15-3799 (7th Cir. Aug. 10, 2016).
- ²⁵ In 2016, several pharmaceutical companies were targeted in a long-running DOJ probe and a leading poultry distributor sued several poultry producers, alleging price fixing. See endnote 22 for details and sources.
- ²⁶ This case was filed after the SEC filed a complaint, more than four years after the end of the proposed class period. The plaintiffs in the class action stated that the SEC complaint first revealed the alleged fraud.
- ²⁷ Outcomes of the motions for summary judgment are available from NERA but not shown in this report.
- ²⁸ *Active cases* equals the sum of pending cases at the beginning of 2017 plus those filed during the year.
- ²⁹ In 2016, 84% of dismissed merger-objection cases were dismissed within one year of filing. Prior to 2016, a period completely before the *Trulia* decision, about 66% of such cases were dismissed within a year of filing.
- ³⁰ In addition to merger objections and standard securities class actions, our database includes a small number of "other" cases (see Figure 3).
- ³¹ Nearly 90% of cases filed before 2012 have been resolved, providing evidence of longer-term trends about dismissal and settlement rates. Data since then is inconclusive given pending litigation.
- ³² We only consider pending litigation filed after the passage of the PSLRA in 1995.
- ³³ The D.C. Circuit was excluded, as it generally has few securities class action filings.
- ³⁴ Each of the metrics in the *Time to Resolution* subsection excludes IPO laddering cases and merger-objection cases.
- ³⁵ In fact, in January 2018, Petrobras agreed to settle its securities class action for \$2.95 billion. That settlement has not yet been finalized as of the date of this report.
- ³⁶ Over the last decade, aggregate NERA-defined Investor Losses peaked at about \$1.2 trillion at the end of 2012.
- ³⁷ The axes are in logarithmic scale, and the two largest settlements are excluded from this figure.
- ³⁸ The number of cases voluntarily dismissed within one year of filing nearly tripled.
- ³⁹ Commentary regarding a 2017 ruling in the Southern District of New York indicated that "[p]laintiffs in [*Cheung v. Bristol-Myers Squibb*] had originally filed their lawsuits in a federal district court, but after the federal district court issued a ruling that was unfavorable for the plaintiffs, the plaintiffs voluntarily dismissed their lawsuits without prejudice and then refiled them in Delaware state court." See "Getting Your Company's Case Removed to Federal Court When Sued in Your 'Home' State," *The Legal Intelligencer*, 21 December 2017. The case referred to is *Cheung v. Bristol-Myers Squibb*, Case No. 17cv6223 (DLC), (S.D.N.Y. Oct. 12, 2017).

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